Croonian Lectures
ON
MIND, BRAIN, AND SPINAL CORD,
IN CERTAIN MORBID CONDITIONS.

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LECTURE II.

MR. PRESIDENT AND GENTLEMEN,—In the last lecture I was venturesome enough to attack the materialistic view of mind which is at present so much in vogue, and to maintain that mind had its foundation, not in matter merely, nor yet in spirit merely, but in something, common to both, which might be matter at one time and spirit at another, so that, in reality, matter might be regarded as convertible into spirit, and spirit into matter. I attempted, I fear, more than I could hope to accomplish in any case—more than could be accomplished in the short space of an hour certainly. In my present lecture I am far less ambitious, my object being simply to deal cursorily with two practical subjects which, though not wholly disconnected, have no necessary connexion with each other. What I now propose to do, indeed, is simply to say as much as I can in the time—first, upon *incipient insanity*; and secondly, upon a disorder, half nervous, half mental, to which I propose to give the name of *neuriasis*—a disorder underlying hysteria, hypochondriasis, and certain other affections akin to them.

CONCERNING INCIPIENT INSANITY.

Very loose notions are abroad respecting the symptoms of insanity. Too often, if not overlooked altogether, all symptoms are practically disregarded, except the one which alone is recognised by the law of the land—namely, *delusion*. Practically, also, delusion is regarded, *not* as many-sided, *not* as having *often* to do with certain very definite and very different morbid mental conditions other than intellectual, but simply as some undefined, unintelligible derangement of the reason. But this is a view which cannot be defended, and which must be set aside before it is possible to arrive at any clear notions respecting the symptoms of incipient insanity.

If a visit be paid to a lunatic asylum with a view, not to group the inmates according to this or that classification of cases of insanity—no easy task, by the way, for the groups interblend in every direction,—but simply to gain such a knowledge of the symptoms of actual insanity as may aid in the detection of the symptoms of incipient insanity, the most prominent of these symptoms are, not delusion only, but self-conceit, misanthropy, distrust, uncontrollable impulsiveness, melancholy, a biassed and prejudiced reason, a disordered fancy, delirious excitement, and the states to which the names of dementia and general paralysis are given. Or rather this list may be simplified by disregarding the two sets of symptoms last named, the truth being that dementia and general paralysis are states which may be regarded as endings of insanity rather than as accompaniments—states, too, which have no special connexion with insanity, inasmuch as they may have their origin in other disorders as well. And, further, on looking into the matter a little more closely, the symptom of delusion is found to present certain varieties, each of which would seem to be inseparably associated with, and in some measure dependent upon, a definite morbid mental condition other than simply intellectual. This, at least, is the conclusion at which, in making this survey, I find myself forced to arrive; and thus, as it seems to me, a direct way of arriving at a knowledge of the symptoms of incipient insanity will be to take in turn each of the symptoms of actual insanity, and look into its early history as far as need be.

Intense self-conceit, with or without delusion, is undoubtedly a prominent symptom in very many lunatics. Unless too demented to think at all, or too crazy to think consecutively, the lunatic is sure to display this feeling in some unmistakable way, very frequently in an arrogant manner which is almost characteristic of his disorder, not unfrequently in words or deeds which cannot be misunderstood. Along with this intense self-conceit, there may be, or there may not be, some actual delusion, the facts as gathered from the history of very many cases seeming to show that there is no delusion at first. And when delusion is actually present, this state of things would seem to be exaggerated rather than altered. The patient has come to believe himself to be wiser, richer, stronger than he really is. In spite of the most glaring contradictions in fact, apparently by the starving of reason arising from the mere overgrowth of the feeling of self-conceit, he may come to believe himself to be the wisest, or the richest, or the strongest of men. All this may be without any wavering in the mind as to who is who. The lunatic, lost in self-conceit, may have delusions as to what is his, but he knows all the while who he is. *Ego* is still *ego*. But the delusion may strike deeper still, and the very idea of personal identity may be destroyed, *ego* becoming *alter* by an *alteration* which, as it would seem, may still have its rise in the exaggeration carried now to the fullest degree, of that inordinate self-esteem of which I am speaking, for in this case the change is into someone who is the reverse of insignificant—very frequently into Napoleon I., or Lucifer, or the Psalmist King, or even Christ the Saviour. In these cases, where intense self-conceit is associated with one or other of the delusions of which I have been speaking, the rule would seem to be that the delusion was not present at first. I know of no exception to this rule. And thus I would venture to look upon intense self-conceit without delusion as marking a state of mind in which delusion may readily find entrance—as being, it may be, a symptom of incipient insanity.

Misanthropy, more or less marked in degree, with or without delusion, is another prominent symptom in very many cases of insanity. If the lunatic does not actually hate the people about him, he dislikes them, and if his hatred or dislike is turned in any one direction more especially, it is sure to be against those who have the greatest claim upon his affection. His whole moral nature in this respect is thoroughly perverted and warped, and he is very likely to suppose that others have the same feelings towards him that he has towards them. Sooner or later he is almost sure to do this, and by doing it to become subject to a delusion which may be said to arise naturally out of his misanthropical state of mind, just as the delusions which have been mentioned in connexion with intense self-conceit may be supposed to have their origin in that particular state of mind. At first, however, there would seem to be no delusion along with the misanthropy; and, therefore, it is no unfair inference from the facts, that misanthropy may indicate a state of mind tending towards insanity—a state which may easily change into insanity by becoming complicated with some kindred delusion. Thus regarded, indeed, misanthropy, without delusion, may have to be reckoned among the symptoms of incipient insanity.

In very many lunatics, also, there is a most suspicious disposition, sometimes with, sometimes without delusion. Very often, indeed, it would seem as if a suspicious disposition, not at all remarkable to begin with, had developed by a natural process of growth into an actual delusion, what was a mere vague feeling of distrust at first, leading only to the half-formed notion that others were more ready to do them harm than good, becoming in the end, by being indulged in, a firm conviction that others were committed to an actual conspiracy to poison them or to do them some other grievous injury. That this is the history of this, the commonest of all the delusions, I am satisfied; and this being the case I consider myself at liberty to put distrust without delusion, along with intense self-conceit without delusion and misanthropy without delusion, among the symptoms of incipient insanity.

In very many lunatics, also, especially in those who are most misanthropical, there is a manifest want of self-control and of voluntary power generally, with or without delusion. This want of self-control may express itself at any moment in violent words and deeds, in violent deeds perhaps rather than in violent words. In the worst cases, even without delusion, this want of self-control may burst out in the most atrocious acts at any moment, even in homicide or rape. If there be this impulsiveness without delusion, it

is customary to speak, with Pritchard, of the case as one of *moral insanity*, and it is perhaps right so to speak. Still it is certain that moral insanity is not so much a form of insanity in this sense, as that, in cases of insanity generally, want of self-control is a marked feature of the disorder, and that the cases of moral insanity so-called are only cases in which this want is more marked than usual. And not less certain is it that this want of self-control is a fundamental symptom in insanity which, in point of time, takes precedence of delusion. "Closely scanning the symptoms," says Dr. Maudsley, "it is seen that the affective disorder (this want of self-control) is the fundamental fact; that in the great majority of cases it precedes intellectual disorder; that it co-exists with the latter during all its course; and that it frequently disappears for a time after this has appeared. Esquirol rightly declared moral insanity to be the proper characteristic of mental derangement, and added, 'there are madmen in whom it is difficult to find any trace of hallucination, but there are none in whom the passions and moral affections are not perverted and destroyed.' And this experience is in entire accord with that of every observer of insanity." And with these remarks of Dr. Maudsley I entirely concur. Want of self-control is, I am sure, a symptom in all cases of insanity, which, in the order of development, takes precedence of delusion. Whether extreme want of self-control without delusion, is sufficient of itself to constitute insanity, is another question, and one which I am not called upon to answer; what I have to do, indeed, is simply this—to point out the relationship existing between the symptoms in question and the other symptoms of insanity, and to insist upon the necessity for regarding want of self-control without delusion as a very prominent symptom of insanity. Along with this want of self-control, there is also very frequently a want of voluntary power generally. The lunatic, as a rule, is led by his feelings and thoughts, and is strangely incapable of exercising his will effectually. Sometimes, in certain directions at least, his will seems to be altogether powerless. I know, for instance, a melancholic patient, in whom I can find no delusion, who believes firmly that he would be well if only he could pray, and whose one desire is to pray, but who never can pray unless some one will come to the rescue and pray with him. In this latter case he prays at once, being easily *led* in this matter as in all others; and, in short, the only marked mental defect, besides the melancholy, which I can find in him is this strange want of voluntary power. Cases, too, are common enough in which, apparently for the same reason and no other, it is impossible, although earnestly desiring to do it, to look into a book; and so also are cases in which this inability to act spontaneously is associated with actual delusion, the patient in the end coming to believe that his will is actually and literally spell-bound. In the end, I say, for in many of these cases, if not in all, the actual delusion would not seem to have been present from the very beginning of the disorder. And thus, as with want of self-control, so with want of voluntary power generally, there would seem to be an earlier stage without delusion as well as a later stage with delusion—a conclusion which is tantamount to saying that want of self-control and of voluntary power generally, without delusion, may be one of the symptoms of incipient insanity.

That state of mind to which is given the name of melancholy is so common among lunatics that melancholy and insanity have been used as mutually convertible terms. The anatomy of melancholy, to go no further, is a treatise on insanity. In some cases of course this state of mind is not so obvious as in others, and it may be difficult to detect it if the patient be reticent. In the more aggravated cases there is no such difficulty, the patient often sitting hour after hour, or day after day, motionless, with clasped hands and woe-begone features, or else, driven past endurance by feelings of anguish and despair, continually moving about, moaning or wailing, wringing his hands, praying for death or even seeking it, too often successfully, at his own hands. As a rule, this state of mind would seem to be the very reverse of that which shows itself in inordinate self-esteem, the patient often believing himself to be thoroughly bad and wicked in every way, with a dreadful doom in store for him both here and hereafter. And the more marked delusions in association with melancholy are in conformity with this idea. I know, for example, a miserable man, long a victim to deep melancholy without delusion, whose delusion now is that he is a murderer condemned and left for immediate execution, who will not look out of the window lest he should see the scaffold, and who, whenever the handle of the door turns, expects the executioner; and the cases are legion of those who, beginning with simple melancholy, end by thinking that they have committed sin for which their inevitable doom is everlasting destruction. It would also seem that this terrible self-depreciation may lead to another kind of delusion, the very opposite of that to which inordinate self-esteem would seem to lead in some cases—namely, to a loss of personal identity, in which the idea of self is lost, as it is lost in lycanthropy. I know, for example, a case in which there were true fits of lycanthropy, or rather cynanthropy, where the settled melancholy which was the predominant state between the fits had its origin, as it would seem, in what may be spoken of as the *scorn-doctrine* of human nature, and in the miserable forebodings as to the future to which it led. But be the relation of this or any form of delusion to melancholy what it may, the fact remains, not only that melancholy is a marked feature in insanity, but that melancholy, more or less marked, without delusion, must have assigned to it a very prominent position among the symptoms of incipient insanity.

In very many lunatics, perhaps in all, the reason is biased and prejudiced in the most unmistakable manner. The mere fact of delusion is in itself a sufficient proof that it is so; and this is not the only proof. The whole facts of the case, indeed, are calculated to show that there is a radical defect in the reason—that this faculty is warped, not only in one particular direction, but in other directions as well. I very much question, indeed, whether the use of the term *monomania*, as implying that the reason acts correctly in all directions except that of some single delusion, is defensible: at all events the facts would certainly justify the conclusion that even in the cases which most deserve to be brought within the category of monomania there is a strongly biased and prejudiced state of mind quite apart from the particular delusion. In listening to a story, for instance, only half of what is said is attended to, and it is perfectly useless to take steps to secure a hearing for the other half. And in reading it is the same: thus, nothing is more common than for a melancholy patient to find nothing in the Bible but what confirms his gloomy forebodings. As it seems to me, indeed, the facts show most unequivocally, not only that the reason is warped, but that a common way for delusion to enter the mind is by this particular way, the delusion being probably nothing more than the natural consequence of the warped reason being allowed to perplex itself for too long a time in any particular line of thought. How often, for example, has the delusion of being eternally lost entered into a gloomy unbalanced mind by dwelling too long and too exclusively upon the intellectual conception of sin! How often have men gone mad in other ways by "too much learning"? Nor is it difficult to understand how, by being continually nursed in a mind strongly disposed to take a wrong view of everything, a thought, not at first a delusion, may become a delusion. The case is plain enough. There is good reason to believe that the reason is greatly warped in many, if not in all, lunatics, and that very often, to say the least, this state precedes the development of delusion in any form: and thus the natural inference must be that among the symptoms of incipient insanity may be reckoned this one in particular—namely, a strongly biased and prejudiced state of the reason, without delusion.

In not a few lunatics, also, there are illusions and hallucinations which point to imagination disordered in the direction of the senses. I know, for example, a lunatic painter who believes himself to be Apollo, and who, before becoming possessed by this *idée fixe*, had *illusions* in which he saw all the gods of Olympus in the clouds, and heard them speaking to him in every sound that then fell upon his ears. These illusions, which passed away when the delusion of which I have spoken became firmly fixed in his mind, were never more than half-delusions. The patient had them when left to himself; he might always be reasoned out of them. He was, in fact, half sceptical as to their reality at all times; and this would always seem to be the case with illusions. There is some *external* impression upon the senses, special or general, which is misread, and the mind is never abso-

lutely confident about the reading. If, indeed, the mind were confident, the illusion would be no longer an illusion, but a delusion. I also know a lunatic now believing that he has committed the unpardonable sin, who before becoming deluded in this manner, had occasional *hallucinations*, in which he saw the Arch-Tempter and heard him speak as well, when there was absolutely nothing either to see or hear. He had an hallucination—that is to say, his eyes and ears (any other of his senses, special or general, might have led to the same blunder, *hallus*, whence hallucination) misled him, not by misreading an actual *external* impression upon the senses, but by acting independently of such impression. As with the former patient, so also with this, it was always possible to shake faith in the reality of the hallucination—to make it appear more or less as a dream; and this, moreover, would appear to be the case with all hallucinations—that the mind is not so thoroughly convinced as it is in the case of delusion. Moreover, so far as I can make out, these illusions and hallucinations not unfrequently precede the development of actual delusions, and, in short, there is, as it would seem, abundant reason for thinking that an irregular fancy showing itself in illusions and hallucinations may be considered as a symptom of incipient insanity.

And, lastly, insanity may declare itself in delirious excitement, the patient—as the case may be—being sleepless, restless, indifferent to hunger and thirst, talking incessantly, precipitately, indistinctly, in an altered and harsh voice, it may be, without any thread of thought upon which to hang his words, jabbering that is to say, or talking gibberish; or else, pacing or dancing about, laughing, singing, declaiming, shouting, howling, gesticulating wildly; or else tearing off his clothes in shreds, and destroying everything upon which he can lay his hands; or else, rushing with tiger-like fierceness upon anyone who comes within reach; or else, filthy beyond measure, passing his excrements anywhere, and often smearing himself all over with them; or else, utterly gluttonous, gorging upon anything, even upon the foulest offal by preference; or else, utterly lost to all sense of shame, abandoning himself to practices too loathsome to be named; or else—instead of the animal part of his nature being thus rampant,—exhibiting the most terrible contempt of the flesh, refusing food because he will not pander to his appetite, or even cutting off his right hand, or plucking out his right eye, because he thinks that these members have been, or may be, the means of making him offend against some supreme moral law. In this sad case everything in the shape of thought or feeling is, as a rule, all but lost in a state of tempestuous chaos. There are, of course, infinite varieties in the manifestations of raving madness, as well as in the ways in which the disorder may begin and end. The delirious state may be gradually developed upon, or suddenly burst out in, any variety of insanity; it may follow immediately upon an epileptiform seizure in a person whose mind to all appearance is sound; it may be suddenly developed without such seizure, and this again and again with comparatively sudden recoveries and with almost complete lucid intervals, as in *relapsing mania*—a disorder, by the way, which in all probability has an epileptiform basis, the fit of raving being the true counterpart of the fit of convulsion. Usually, however, it is preceded, if not by actual insanity in one or other of its definite forms, by one or other of those forms of mental disorder which have been instanced as pointing towards insanity—as being, in short, signs of incipient insanity. Nor are the endings of raving madness less varied than the beginnings; for among these must be reckoned, not recovery only, but each and all of the many forms and complications of insanity, as chronic mania, melancholia, dementia, general paralysis, and the rest. Always, as it would seem, the mental power is more or less damaged by an attack of maniacal raving; too often there is that tendency to return which is exhibited in the most marked degree in relapsing mania. I am not sure, however, that some consolation is not to be found in this very tendency. I cannot help but think that there may be what may be spoken of as an epileptiform basis, not only in cases of relapsing mania, but in every case of mania. I cannot but hope that these bouts of mania may often come and go as an ordinary epileptiform attack may come and go, often, too, with as little damage to the mind; and also that they will yield more readily to treatment when this epileptiform basis is more clearly recognised in practice. I am also very much disposed to think that the delirious excitement of actual insanity is not altogether peculiar to the fully developed disorder—that, in short, a tendency to it may be reckoned as one of the many symptoms of incipient insanity. At all events there can be no doubt that in not a few cases in which insanity has declared itself in delirious excitement this was preceded by strange talkativeness, or uncontrollable fidgettiness and restlessness, or violent outbursts of temper, or fits of light-headedness, or in some other way more or less analogous to these.

There are, no doubt, many variations and many combinations in the symptoms of incipient insanity. Sometimes one or two of the symptoms only are present to the exclusion of the rest. If all are present—an almost inconceivable case—then these would be:—a state of intense self-conceit, without actual delusion,—a state of moroseness and misanthropy, without actual delusion,—a state marked by great mistrust and suspicion, without actual delusion,—a state of uncontrollable impulsiveness, without actual delusion,—a state of melancholy, without actual delusion,—a warped state of the intellect, without actual delusion,—irregularity of fancy, showing itself in illusions and hallucinations,—and lastly a tendency to delirious excitement. In actual insanity one or other of these several morbid mental conditions is always present, the change which has happened consisting only in the addition of some actual delusion, which delusion very often, to say the least, may be looked upon as the natural result of the exaggeration of the morbid mental condition most closely associated with it.

Nor are these remarks without a very definite practical bearing. On the contrary, if the view here taken be the true view, it may be hoped that by its adoption, insanity may become a little more intelligible, a little more preventable, and a little more manageable when actually developed.

In the rough sketch which has been made, it appears that delusion is not an indefinite disorder of the intellect and fancy coming on no one knows how, without warning of any kind, but a very definite disorder taking many shapes, each of them associated with some morbid mental condition from which it cannot be dissociated, and often receiving this shape, as it would seem, as a natural consequence of the mind having been allowed to go wrong in the direction of some particular morbid mental condition, intense self-conceit, misanthropy, melancholy, or other. Nothing is more certain than this—that by indulging in a perverse way of feeling or thinking, sooner or later, the reason and will are mastered by this feeling or thought, and that when this point is arrived at, the feelings and thoughts and actions, as a matter of course, become more or less irrational and involuntary. Arrived at this point, indeed, any delusion, any fancy, may easily take undisputed possession of the mind. And thus the delusion, instead of being something almost unintelligible, becomes little more than a natural consequence of the unresisted continuance of the particular morbid mental condition with which it is associated, and from which it cannot be dissociated.

If the mind be allowed to rest too long in any of these morbid mental conditions which are constantly associated with delusion, the will and reason are deposed, and feeling is enthroned in their stead. This is all; for when feeling is raised above will and reason the result of necessity is not only disorder but delusion. And thus insanity becomes somewhat more intelligible, inasmuch as it reduces itself to little more than the natural consequence of the mind having been allowed to go wrong in the direction of some perverse feeling until a point is arrived at in which the will and reason have no longer any control over it—an end in which—for all the unchecked evidences of the mere feelings are delusive — delusion in one form or another is the inevitable result.

And if delusion take these different forms, and is brought about in these different ways, it is plain that there are several very definite indications of treatment which may be followed out in a very hopeful spirit. The case is not one in which delusion is no one knows what, coming about no one knows how, in which the physician is left in a state of uncertainty as to what ought to be done to prevent it and to cure it. The case is definite enough. There are several morbid mental conditions, as intense self-conceit, misanthropy, melancholy, uncontrollable impulsiveness, and the

rest, preceding insanity, continuing when insanity is actually developed, and each of them leading naturally to the delusion which is the conclusive evidence of insanity. There is, in fact, a definite morbid mental condition other than delusion to be dealt with. By dealing with it, delusion is to be prevented; nay more, by dealing with it delusion is to be counteracted and conquered. It is as much a duty to deal seriously with this morbid mental condition as it is with the actual delusion, for delusion is the natural consequence, sooner or later, of leaving it to itself. Every effort must be made to teach the patient that he is responsible for his feelings and thoughts as well as for his actions; that he can and must master them; and that if he does not try, his will and reason may soon become too powerless to prevent his feelings and thoughts and actions from becoming involuntary and irrational as in insanity. He must be helped and made to try to do all this in every possible way. A proper mental discipline must be enforced, upon the details of which I cannot and need not enter.

Nor is a different course to be followed when matters have gone farther wrong, and there is actual delusion. Certainly all is not done in this case when the lunatic is provided with a comfortable home, and when every conceivable care is taken of his body. All this is wanted, and more also—much more, if what I have said about mind be true. What is wanted is that medical and clerical aid should be brought into closer conjunction than they are at present, with clearer notions in both physician and clergyman as to the autocracy of *mind*. What is wanted is the co-operation of educated persons, similarly enlightened as to mind, who will as a labour of love tend upon the lunatic, giving him the helping hand which now, in so many instances, they are giving to the ordinary sick. What is wanted also are more carefully trained ordinary attendants. With respect to the ordinary nursing of the insane, indeed, a great revolution is necessary, akin to that which is being brought about in ordinary nursing by Miss Nightingale, by the Misses Merryweather, and by their fellow philanthropists.

But it is more than time that I should pass on to the next subject with which I have to deal, and I pass on accordingly, leaving the amplification of these hints to another occasion, if such may ever arise.

CONCERNING NEURIASIS.

The subjects of the condition to which I venture to give the name of *neuriasis* are spoken of as hysterical, hypochondriacal, or nervous. They have, in fact, that constitution or temperament which Whytt, following in the steps of Sydenham, showed to be a common basis in the states of disorder called hysteria and hypochondriasis, the *diathesis spasmodica* of Willis, the *état nerveux* of certain modern French writers.

For the most part they are easily tired, easily become faint for want of food, are easily overcome by sleep; for the most part they are more the slaves of involuntary irrational impulse, more wanting in composure, than is consistent with a well-balanced state of mind. They are more frequently women than men; they are never the robust and strong-minded of either sex; in them all the feminine qualities of body and mind predominate over the masculine.

Regarding the subject a little more closely it is possible to detect in neuriasis certain peculiarities of body and certain peculiarities of mind which are more or less constant; and what I have now to do is to try to justify these statements by taking each of these peculiarities in turn. I begin by taking the peculiarities which have to do with the body, and then pass to those which relate to the mind, passing from one to the other in a roundabout way, for it matters little what course be pursued provided the survey be moderately complete before it come to an end.

Under or after strong emotion or excitement, may be noticed first of all the sign which Sydenham regarded as pathognomic of hysteria and hypochondriasis—a proneness to pass, under any strong emotion or excitement, or after it, large quantities of pale, limpid, neutral urine. Often, too, apart from such emotion or excitement, there is an irresistible *besoin d'uriner*. To call such feelings into existence, indeed, it is enough for the thoughts to take this direction at an inconvenient moment, as in a railway train in motion, or in company when the want must be hid. Such is the weakness at times, that the attention is alive to scarcely anything else; and never is it other than a prominent torment—a torment so prominent as to deserve to be mentioned first as it were, in describing the physical peculiarities of neuriasis.

After this peculiarity of neuriasis that which next deserves to be mentioned is an extraordinary proneness to abdominal flatulence—*pneumatose intestinale*. Air is suddenly poured out into the alimentary canal in the most extraordinary way, whether digestion be going on or not, with what may seem to be a cause or without it; and, being there, it makes itself known by painful distension of the stomach and bowels, by noisy rumblings, or in more Homeric ways. The case is analogous to that which has just been described as affecting the kidneys and bladder, and the trouble and annoyance caused is of the same kind and scarcely less in degree, especially when, as often happens, the pressure of the air gives rise to distressing breathlessness by interfering with the action of the diaphragm. With such frequent and urgent uneasiness in the abdomen as this, there is indeed little wonder that the term "hypochondriacal" should have come into use, and continued in use, as the name for one of the varieties of the disorder which I am proposing to call neuriasis.

A third bodily peculiarity in neuriasis is a proneness to break down in laughing or crying. There is what is commonly spoken of as a hysterical disposition in this respect. Not only does the laugh or tear come too readily, but when it comes it is very likely to be at the wrong moment—the laugh being when the tear should be, the tear in place of the laugh. It has little or nothing to do, in fact, with an excessively sympathetic disposition or an over-sensitive nature; any slight commotion in the system, however brought about, may show itself in this way, and, in short, it is the exception rather than the rule for the patient to be able to tell why he laughed or why he cried.

Along with this undue proneness to laughing and crying must also be mentioned another peculiarity, to which, in its more marked form, the name of *globus* is given—a choking feeling in the throat as if from a ball there, which prevents swallowing, and leads to constant efforts at gulping. This feeling is closely connected with the bouts of laughing and crying, being rarely absent if they are present, and also with the fits of abdominal flatulence, with the latter perhaps more particularly. Often it is, as it were, part and parcel of the rumblings which form so conspicuous a feature of this flatulence, there being first the rumbling of the bowels, and then a mounting of this sensation by way of the epigastrium to the throat, where it takes the form of globus; but, as Dr. Reynolds points out, it is a mistake to suppose that the throat trouble to which the name of globus is given has always this commencement in the abdomen. Often, indeed, the feeling of choking, of which globus is one of the forms, is manifestly confined to the throat; and not unfrequently the abdominal symptoms may as manifestly follow upon the throat trouble, the globus disappearing as the flatulent rumblings make themselves felt or heard.

Another peculiarity not unfrequently met with in neuriasis is a very disagreeable superabundance of saliva. This is mentioned in their article on "Etat Nerveux" by MM. Sandras and Bourguignon; and the fact, for fact it is most assuredly, must not be lost sight of. The cause would appear to be a difficulty of swallowing dependent upon the spasmodic state of the fauces and throat, showing itself when more fully called into action in the choking feeling called globus, in the bouts of laughing and crying, and in various other ways. The saliva, which is always being formed in large quantities, does not find its way into the stomach by insensible acts of swallowing, as it ought to do; and hence the overflow. But be the explanation what it may, the fact remains that along with the other peculiarities which have been mentioned—proneness to pass large quantities of pale, limpid, neutral urine, with urgent *besoin d'uriner*, proneness to abdominal flatulence, proneness to tears and laughter, proneness to choking feelings of one kind or another—this also must be mentioned—namely, a disagreeable superabundance of saliva.

Constipation also would seem to have a claim to a place in the list of the bodily peculiarities of neuriasis, though not perhaps to any very prominent place. In cases of hysteria and hypochondriasis so-called it is but seldom that the bowels will act without help; and what is true of these cases would seem to be more or less true in all cases of the kind. In a word, constipation is so generally a marked

peculiarity in neuriasis as to deserve, to say the least, this passing notice in the present place.

Tenderness, with more or less uneasiness or actual pain, apart from pressure, in one or other part of the abdomen, is another bodily peculiarity in neuriasis which must not be overlooked—which cannot well be overlooked. Often it is in the pit of the stomach or under the ribs at a point in a line descending from the left nipple, or in both these places at the same time; not unfrequently it is at the same time at another and third place—namely, over the spine, as spinal tenderness, at a point corresponding more or less nearly to the spinal insertion of the nerves which supply the two other painful parts which have been indicated—a threefold arrangement of tender or painful places which Briquet regards as characteristic of the so-called hysterical condition—as the *trépied hysterique*, the tripod, that is to say, on which the diagnosis of hysteria may be made to rest firmly. And certainly this opinion has much to recommend it in fact. At the same time it is not to be doubted that there are many cases of so-called hysteria in which all that can be affirmed is that this tenderness, with or without more or less uneasiness or actual pain, apart from pressure, is in one or other part of the abdomen or dorso-lumbar region of the spine, without any such particular threefold localisation as that to which Briquet refers. Often, indeed, all that can be said is that there is *shifting* tenderness or uneasiness or pain in the abdomen. Most certainly it is so in the so-called cases of hypochondriasis; and what is true of these cases would seem to be scarcely less true of cases of so-called hysteria, of cases of neuriasis generally, in fact. In a word, all that can be safely affirmed with respect to the peculiarity in question is that it is abdominal without being more specially localised—localised sufficiently to have helped by its localisation to suggest the terms hypochondriacal and hysterical as fitting names for it, nothing more.

A marked disposition to spasm in one or other form is another bodily peculiarity in the condition under consideration. In its simplest form this may be no more than intestinal gripings or common cramps in the limbs; in its most marked manifestation it may amount to that general convulsion of all the muscular system to which the name of hysterical is given. This condition is most marked in hysteria so-called, least marked in hypochondriasis so-called. In some cases it is impossible to overlook it; in others it may be somewhat difficult to detect it; but in all cases it exists as much more than a mere latent potentiality. So marked, indeed, is this disposition to spasm in the great mass of cases of neuriasis that there is no difficulty in understanding why Willis should have chosen the name *diathesis spasmodica* for that common basis which he saw clearly enough to exist in the several nervous cases of which those called hysterical and hypochondriacal are varieties.

And, last of all, a disposition to *periodicity* must have a place among these bodily peculiarities of neuriasis. The fact is not to be denied. In all cases certain phenomena—pain, spasm, feverish and congestive movements of the circulation, and the rest, are apt to appear and disappear more or less after the manner of an ague. There seems to be some undue delicacy or mobility by which the frame is more readily swayed than it ought to be by such opposing influences as heat and cold, day and night, feeding and fasting, and the like. But be this as it may, the fact remains that a disposition to periodicity in one form or another must be reckoned upon as one among the many bodily peculiarities of neuriasis; and this alone, not the explanation of the fact, is that which concerns me here.

Nor are the mental peculiarities of the condition under consideration inconspicuous and uncharacteristic. On the contrary, it is in these very peculiarities rather than in the bodily, that the distinctive features of neuriasis are to be traced most readily.

Among these mental peculiarities that which is certainly not the least distinctive is undue self-sensitiveness. This may show itself in extreme conceit, in most distressing diffidence, or in other ways. Self cannot be forgotten; only self can be talked about. The state of mind in this aspect is indeed one which, to say the least, often implies a dangerous proximity to the intense self-conceit of the lunatic.

Another mental peculiarity is a dominant craving for sympathy. Undue self-sensitiveness instinctively seeks relief in this way. The good opinion of others cannot be dispensed with; it is the very breath of life. If this be withheld all is withheld that is regarded as worth having; and so day after day passes in miserable disappointment, for the good opinion of others is precisely that which of all things is most difficult to get—especially when wanted.

Another mental peculiarity in neuriasis, the complement perhaps of the last, is feebleness of will. "What I would not that I do, what I would that I do not," is the confession too often made, and too truly made, in deeds at least, if not in words. The mental character is marked by fickleness, impulsiveness, irresolution, want of composure, unrest, and other unmistakable signs of a radical feebleness of will—by wilfulness, it may be, for wilfulness in nine cases out of ten means the reverse of fulness of will—will over-ridden by some feeling or fancy—waywardness—an involuntary rather than a voluntary state of mind.

Another marked mental peculiarity in neuriasis, more marked perhaps than any of those which have been already noticed, is fancifulness. Due care is not taken in forming firm foundations in fact. Conclusions are jumped to hastily. The dominant faculty is, not reason, but imagination, and the fancies formed are too often indistinguishable from true delusions. A pain or uneasy feeling, for example, is supposed to point to some disease, and soon the reason refuses to be convinced that the disease is not present. This is the characteristic misdirection of the imagination in the so-called hypochondriac. What is at first a mere fancy, in the end becomes a delusion, by the removal or burial of the landmarks which mark the line when soundness of mind becomes conterminous with unsoundness. As a rule, however, the change does not go so far as this in neuriasis. Fancies of all kinds are continually crowding in upon the mind, but they can be ejected by a combined effort of will and reason, though not always without very great effort. What is wanted is not so much the capacity to reason soundly as the ability to do so without help. What is wanted is intellectual independency rather than intellectual clearness; and, for the most part, the fancy will walk steadily enough if she can but lean upon the arm of a good counsellor.

Along with this fancifulness, and in a sense a part of it, may be noticed also a marked disposition to imitativeness. There is a curious readiness to copy the thoughts, words, and acts of others—a readiness which would seem to imply a certain want of originality in character. There is the gift which, if sufficiently under control, makes the actor; and herein may often arise much confusion, for what at first may be a simple acting, may afterwards be more than this, the actor being carried away by his part, and unable to become himself again, in consequence of not being sufficiently on his guard against the danger of a fancy becoming a fixed delusion if it be given way to too much. The attempt to deceive persisted in too long may easily lead to the deceiver being himself deceived, as is shown in a hundred different ways in the history of the condition of hysteria so-called.

Unbalanced spirits may be also mentioned as another of the mental peculiarities of neuriasis. The mental state in this respect is the reverse of that which is called composure. The spirits, judging them by any common standard, are always higher than they ought to be, or lower—the latter more frequently than the former. In neuriasis, indeed, as in mental unsoundness proper, a disposition to melancholy would seem to be more common than a disposition to the contrary state of levity—so common as to have led many to speak of hypochondriasis as a variety of melancholia. Moreover, it is in cases like these that the patient can so well understand what Jeremy Taylor means when he speaks of men being "desperate by too quick a sense of constant infelicity." Last of all, there is often to be noticed among the mental peculiarities under consideration a comparatively feeble sense of moral obligation. In not a few cases, no doubt, exception may very justly be taken to a statement like this. In not a few cases, without question, there is rather a morbid regard for truth and a tenderness of conscience by which the most trifling exaggeration or wrong-doing is made to become a positive torment. But more frequently by far there is a state of things in every way opposed to this—a state marked, if not by a habit of actual lying, by the most extraordinary disposition to exaggeration, and a moral deafness which makes it difficult to hear even the loudest calls of conscience. It is notoriously difficult to get the truth out of a so-called hysterical patient, and it really seems as

if she could not help but exaggerate and misrepresent; and though not so notorious a fact, a fact it is nevertheless, that she is more apt to excuse than to condemn herself when in the wrong. And what is true of this case is, so far as my experience goes, not less true in the great majority of cases of neuriasis—is so true, indeed, as to leave no doubt as to the propriety of placing this feeble sense of moral obligation among the other mental peculiarities of neuriasis.

And thus, to recapitulate briefly the heads of what has been said respecting the physical and mental peculiarities of neuriasis, among the former will have to be placed—proneness to pass large quantities of pale, limpid, neutral urine under any emotion or excitement or after it, with a frequent irresistible *besoin d'uriner*,—proneness to abdominal flatulence, *pneumatose intestinale*,—proneness to fits of laughing and crying without sufficient reason for them,—proneness to globus,—proneness to overflow of saliva,—proneness to constipation,—together with tenderness on pressure, with more or less uneasiness, or actual pain apart from pressure, in one or other part of the abdomen, or under the left nipple, or somewhere in the course of the spine,—with a marked disposition to spasm, and periodicity in one form or another; and among the latter, or mental peculiarities,—undue self-sensitiveness,—overpowering craving for sympathy,—quick and perverse likes and dislikes,—feebleness of will, showing itself in impulsiveness and in many other different ways,—fancifulness,—imitativeness,—unbalanced spirits, the inclination being commonly towards despondency,—and lastly, a comparatively feeble sense of moral obligation.

Few in the present day will be prepared to contend that the womb has any special connexion with hysteria, or the liver or any other abdominal viscus with hypochondriasis, or to doubt the correctness of the view which regards both hysteria and hypochondriasis as disorders, closely allied, of the nervous system. Still it may be doubted whether, practically at least, the latter view is as clearly realised as it ought to be—whether the word hysteria does not still retain a good deal of its old meaning, and not unfrequently mislead effectually in practice. At all events, hysteria and hypochondriasis can be no fitting names for that general derangement of mind and body of which I have been speaking; another name is evidently desirable which will point away from the womb, or liver, or other abdominal viscus to the nervous system; and hence my excuse for proposing the term neuriasis. I hope, however, that a time will come before long—the time is not yet ripe, I allow—when it will be possible to get a step further than this, and choose a name which will include the *mental* as well as the *nervous* half of the disorder in question; for I cannot help but think that the *nervous* trouble is the effect rather than the cause of the *mental* trouble. Nay, I am even sanguine enough to hope that eventually, by the institution of a sound discipline in which the mind is taught—chiefly through the influence of wise mothers acting upon it in the morning of life—to know and exercise its high powers of subjecting the feelings and thoughts as well as the actions to sound reason and will, that mankind may be delivered not only from the evils of neuriasis, but even from the still graver evils of actual insanity.

CLINICAL MEANS OF RECOGNISING MERCURY IN THE EXCRETIONS.—M. Mayençon and Dr. Bergeret, in an interesting paper on this subject in Robin's *Journal d'Anatomie*, No. 1, 1873, give the following as the conclusions at which they have arrived:—1. That mercury and its salts are absorbed by the skin as well as by the stomach. 2. That of the mercury absorbed a part, and that the major part, is immediately eliminated, whilst the smaller part impregnated the tissues, from which it is only insensibly eliminated. Even this part, however, is rather quickly eliminated if the use of the medicine has not extended over any great length of time. 3. Elimination seems to be effected by all the excrementitious fluids, but chiefly by the urine and the intestinal juices. 4. Iodine has a marked effect in clearing away mercury from the tissues. 5. Mercury and mercurial preparations discharged by the humours, and especially by the urine, are readily discoverable by the action of a voltaic element—iron and platinum. The mercury forms a metallic coating on the platinum, and should then be converted into the bichloride, and finally into red biniodide with a solution of iodide of potassium.

A Lecture
ON THE
TREATMENT OF STONE IN THE BLADDER BY SOLVENTS:
ITS HISTORY AND PRACTICE.

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GENTLEMEN,—The inquiry as to whether it be possible to dissolve stone in the bladder by medicinal agents, and so to avoid any operative proceedings for its removal, is one which is evidently exciting a good deal of interest at the present moment. During how many centuries has this question appeared and reappeared! Some accident calls public attention to it; much is written and said; little is done, and less is realised, in relation to this most desirable object; after which a cycle of indifference follows. Meantime, as the sum of these reiterated efforts, some sort of progress results. Nevertheless the subject is scarcely considered in standard surgical works, although it is one fraught with interest to us all. For myself, I confess, it has always had a degree of fascination. It would be so great a triumph to our art to dissolve the stone without damage to the delicate structures in which it arises and finds its residence. And thus it is that I have not only alluded to it in various works, but have discussed it at considerable length many years ago in one of them.*

I propose therefore to tell you what has been done, and what at present appears to be attainable by the agents employed; in short, to sketch the history of solvents for stone in the bladder from the earliest period to the present day.

You know that the existence of calculus was recognised, and that a cutting operation for its removal, at all events in the cases of boys, was practised, a few centuries before the Christian era. In course of time the attempt was made to dissolve it, especially in the case of adults. It appears that neither Hippocrates nor Galen entertained the belief that this was possible. One of the earliest allusions to the practice is found in Pliny, who says that "the ashes of burned snails' shells are good for expelling the stone." Aretæus (second century) recommends "quick-lime in honeyed water" for the same purpose. Later authors, quoted by Paulus Ægineta (seventh century), speak confidently of the efficacy of goat's blood, and they observe that some solvents wrongly given increase the calculus.

Arriving at the period when medicine flourished in Arabia, we find numerous remedies and complicated combinations systematically given. The celebrated Avicenna (about the tenth century) enumerates many substances supposed to be efficacious. He and others of his time employed occasionally an impure carbonate of potash; but as an example of the kind of prescription current at this period, I give you one of them in full, translated from Avicenna, as it is a curiosity, and gives you a good idea of the very complicated mixture which constituted an ancient medicine:—"Take equal parts of calcined glass, of the ashes of scorpions, of the ashes of the roots of coleworth, of the ashes of a hare, of the ashes of egg-shells from which the chickens have escaped, of the stones found in the sponge, of goat's blood dried and powdered, of lapidis judaici; the same of parsley, wild carrots, marsh-mallow seeds, and gum arabic. Make it into an electuary with honey."†

Between this period and the fifteenth century we can mark no advance. About this time Basilius recommended the internal use of an alkaline salt, obtained from the cuttings of the vine in spring; this on the authority of Boerhaave.‡ Crollius, in his Basilica Chymica (Frankfort 1608), recommended the patient to take a salt of tartar (carbonate of potash) in an infusion of parsley, and also some solutions

* The Enlarged Prostate (1858): last chapter.
† Avicenna, lib. iii., fen. xviii., trac. i. c. xix.
‡ Elem. Chimiæ, 1732, vol. ii., p. 73.

of which lime was the principal ingredient. In 1650 Daniel Sennertus directs the internal use of the same remedies, and also that they should be injected into the bladder through a catheter. About the same time Riverius, physician to the French Court, advises, as many others also did, the ashes of calcined egg-shells. The dose was a drachm of the powder, which was, of course, chiefly lime, to be given in white wine or with diluents twice a day; and it is stated that "potenter expellit calculum in urinæ meatibus hærentem."* Numerous other authorities might be quoted as repeating all these receipts with little or no variation.

Next in order comes, in this country, the famous Mrs. Joanna Stephens. This lady had acquired so great a reputation in the earlier part of the last century that in 1739 the English Parliament, after a formal inquiry, purchased her secret for dissolving the stone at the cost of £5000—a circumstance which produced a large and remarkable literature during the next few years, and gave a great stimulus to research. The document obtained at this cost commences thus: "My medicines are a powder, a decoction, and pills. The powder consists of egg-shells and snails, both calcined. The decoction is made by boiling some herbs (together with a ball which consists of soap, swine's cresses burnt to blackness, and honey) in water. The pills consist of snails calcined, wild carrot-seeds, burdock-seeds, ashen keyes, hips and hawes, all burnt to blackness, soap, and honey."† The dose was a drachm of the powder three times a day, mixed in cider or other liquor, and followed by half a pint of the decoction. If the decoction disagreed with the stomach, the pills were to be substituted. These compounds were found to be very nauseous, and were superseded by other agents. Dr. Whytt, Professor of Medicine in the University of Edinburgh (1761), brought soap and lime-water into favour, giving one ounce of "Alicant soap" and three pints of lime-water daily, illustrating its use by a remarkable case or two.

In the hands of Blackrie (1766), Chittick—who made all his patients send locked cans of veal broth daily to his house that he might add the solvent and preserve his secret,—and others, mixed solutions of potash and lime were much employed; and a considerable amount of evidence of their utility to allay pain was published on good authority. Soap leys of different strengths furnished the potash in many cases; in others the "salt of tartar" was given, and always in a very diluted form.

In France at an early date alkaline remedies had many advocates, such as Darcet (1726)‡ and Pierre Desault (1736). Morand, the famous surgeon of Paris, who came to London to report to the French Academy on Cheselden's operation of lithotomy, made also very careful observations on forty patients treated by Mrs. Stephens's remedies. He was unable to certify to a single case of removal by the solvent, but said that four "thought themselves" cured. Much later the subject of alkaline solvents was investigated by Fourcroy and Vanquelin; more recently by C. Petit (1834). The first and last named employed the Vichy waters. In Italy Girardi (1764) recommended the use of solvents, but extolled especially the virtues of a decoction of uva ursi for that purpose.

Meantime the vegetable kingdom had been largely explored for the same purpose. It will suffice to give a list of a few of the principal plants so employed during the last two or three centuries. I shall name those only which enjoyed the greatest favour. The "Banke cress," or "saxifrage" (hence the name): its seeds boiled in decoction of couch grass; dose of the seeds one drachm. Tincture of the "Pimpinella saxafraga." A tincture of the seeds of the "Lithospermum majus," or "great gromell." The decoction of "Broome"; a tincture of the seeds of "Fraxinella." Tincture of the root of the "Raphanus sativus," or garden radish. Tincture of the seeds of the common nettle. The marsh and yellow mallows, the couch grass, parsley, and the wild carrot were also ingredients in the compound decoctions employed.

And now I come to the experience of to-day. And I suppose you to inquire, What are the existing resources available for a patient who desires at the present time to attempt the solution of a stone in his bladder? I shall divide these into two classes. First, there are the empirical remedies, which have a certain reputation; and, secondly, there is the result of the latest investigation of the subject by scientific observers.

First, the empirical remedies. It is a curious fact that in almost every European country there exist certain persons who obtain a livelihood by making and selling remedies to dissolve the stone. The recipes employed are usually family heirlooms, and a sort of reputation clings to the family, each generation of which carefully preserves the secret, such as it is, and the traditions of their predecessors. In the same way the art of bonesetting, as you no doubt know, is associated with certain names and localities; an art the nature of which was so well discussed and appreciated by Sir James Paget in one of his admirable clinical lectures about five years ago. These solutions—for they usually take that form now—are sold in the country under the name of "constitution water," or some similar term; and they are moreover guaranteed to be useful in all forms of urinary disease.

Peculiar circumstances have given me large opportunities of observing and examining these agents. I have met with them here and in different parts of France. I well remember an old Frenchwoman and her son journeying on foot from the South of France to Brussels, about ten years ago, laden with a basket of heavy bottles filled with the family nostrum for a royal patient there. I may add that her devotion was considerately rewarded. Such unsolicited contributions, either material, as in this case, or by way of suggestion of every conceivable kind, flowed in then from every part of Europe; and such is always the case in similar circumstances.

I may here tell you that I have recently received numerous communications on this subject from known and unknown correspondents, urging on me the value of the recipes which belong to the writers. I shall select two which widely differ for mention here, each possessing interest of its own kind. One was from a French gentleman, who gives me his name, and offers an infallible cure, which of course he does not describe, but consents to communicate it for the moderate sum of a million of francs (£40,000 sterling); and I do not hesitate to say it would be well worth the cost if it could accomplish the wonderful results alleged to be within its power. The other is from an English labourer in Bedfordshire, who wishes me to know what cured his friend some time ago in the neighbouring parish. He freely gives me the formula, and it is a fair specimen of a good country recipe for the purpose, for I have seen many such, and it has some interest for us, as we shall see hereafter. I could not help writing my thanks to this man in reply, and was at some trouble to explain why his remedy might be good in some cases and why it might be prejudicial in others. Here it is in his own words: "Get a peck of wood-ashes, and pour on them a gallon of boiling water; let it stand twenty-four hours; then strain it off as clear as possible, and take a wineglassful every morning, fasting." This is a large dose of carbonate of potash; our old friend the alkali, you see, always recurring. I had the curiosity to determine the quantity. A ley of wood-ashes thus made from pine-wood furnishes a solution of fifty grains of the carbonate to the ounce, so that the quantity taken at once was at least a drachm and a half or two drachms. The other soluble constituents of the ley are sulphate and silicate of potash and chloride of potassium.

Now as to the more pretentious compounds which are sold in this country as solvents, I have submitted the chief to careful chemical analysis, and I intend to present you with the result. Not that I had any doubt as to what their general characters and composition were, nor of the fact that they were all nearly alike in their composition. But I wish you to have an exact statement founded on analysis. A recent examination of a well-known and typical one in some repute in this country, two bottles of which are placed before you, and which you may have for your own analysis if you please, is a simple undisguised solution of bicarbonate of potash in water. You see that they are ordinary wine-bottles, the old "wine-quart"; each contains about an ounce of bicarbonate of potash and fifteen grains of chloride of sodium—the latter possibly due to the spring water of which the solution is made. Half the bottle, which is equivalent to four drachms, is directed to be taken daily.

At this point, let us make a rapid survey of this long and curious history of man's painful, slow, and somewhat

* Riverius Praxis Medica, Lugd., 1657, p. 381.
† Gentleman's Magazine, June, 1739, vol. ix., p. 286.
‡ Expériences sur la Digestion. Paris, 1783.

clumsy efforts to rid himself by medicine of his terrible enemy the stone. Observe that the agents have always been alkaline. At first, and chiefly, the alkaline earth, lime: you mark it as the agent in the calcined snail-shells of Pliny and the egg-shells of Avicenna, which do but reappear in that expensive prescription of Mrs. Stephens in 1739; but in Avicenna's time it was combined with potash, the representative alkali of the vegetable kingdom, as you see in the quantity of burned plants which enter into the composition; and Mrs. Stephens adds also potash and soda in her soap and calcined weeds and seeds. Then lime-water and soap came next into fashion, giving a combination of the three alkaline agents named; and now the popular remedy of the day, sold at many shillings a bottle, of which a large quantity is ordered to be taken daily for three months, as the minimum dose and time, is, as you have just seen, a simple solution of bicarbonate of potash in water, of which the cost is actually less than the bottle and the cork which enclose it! Our country labourer's nostrum is nearly as good in form, has precisely the same solvent power, and is almost absolutely without cost.

Then there is another popular remedy—namely, Vichy water, which is so largely employed by patients with urinary maladies, and which in its time has been vaunted for its solvent powers, on the ground that it consists mainly of a strong solution of carbonate of soda, the alkali of the mineral kingdom.

We are now in a position to arrive at the following conclusion, the only one possible—viz., that all the quack and would-be secret medicines employed from time immemorial to the present day are solutions of either lime, soda, or potash, alone or combined. All the plants, after combustion, furnish alike only one and the same active agent—viz., potash; all shells, whether of eggs or of marine and land animals, furnish alike only one and the same active agent—viz., lime.

Lastly, the medicinal remedies employed by the faculty everywhere, at the present day, are, hydrate of potash, in the form of liquor potassæ; the bicarbonate, the citrate, the acetate, and the tartrate of potash. After them, and less generally employed, are soda and lithia in different forms.

Now, before entering on any consideration of the applicability of all these agents as solvents, from a scientific and not from an empirical point of view, it is necessary to examine briefly the substances they are designed to act upon—namely, the stones in the kidney or the bladder, which it is desired to dissolve. And the first fact that must strike you at the outset is, that these calculi are of different kinds; some having characters diametrically opposite to those of another kind. And the question naturally arises, Is it possible that one form of remedy—namely, the alkaline agent—can be adapted to dissolve calculi whose composition is so varied. I shall remind you of those general terms which I used in a recent lecture on that subject to classify the varieties of urinary calculi. Three-fifths of all the calculi met with among adults of all ages are composed of uric acid and the urates; nearly two-fifths are phosphatic, and about 3 or 4 per cent. are oxalate of lime. Cystine is too rare to be admitted to our reckoning. Three-fifths at least, then, are the products of a urine abounding in acid, of which excess they are the expression. The remaining two-fifths are the product of urine generally alkaline, mostly ammoniacal, of which condition they are the result. The urates, the oxalates, and a very few of the phosphates, are found in the kidney, and are the product of certain constitutional derangements; the greater part of the phosphatic material, whether in mixed or in phosphatic stones, is produced solely in the bladder, and is the product, not of a constitutional state, but of local disease there. Now uric acid, we know by experiments conducted out of the body, to be easily soluble in alkaline solutions, but some of these have a more energetic solvent action than others; and the resulting salts vary in solubility. Thus, urate of lime is a rather soluble salt. Urate of soda is less so, and in this form enters into the composition of some calculi. Urate of potash is more soluble than either of them. Potash is the most powerful agent that can be employed on a uric-acid calculus, among those materials which can be taken internally for a long period of time with comparative impunity. These facts, then, indicate it as the most desirable solvent to employ under certain conditions, hereafter to be described, and as such it has long been regarded. Nearly twenty years ago I called attention to its pre-eminence for this purpose, stating that the "citrates and carbonates of potash are more potent and certain than Vichy water" for the treatment of "uric acid in the form of gravel," and that they should be given largely diluted, "pure water itself being one of the best solvents."* I may add that I have never at any time prescribed Vichy water for any urinary affection, on the ground of its inferiority to the potash solutions. I think the citrate may be fairly said to be the salt which before all others offers the best chance of success; and this by common consent of all who have examined the subject. If, however, it exerts too much diuretic action, as in some cases it seems to do, the next best may be employed—namely, the bicarbonate. And the question comes here—Has this agent been fairly tried on stone in the bladder by a competent observer? I am happy in being able to answer this question in the affirmative. An accomplished physician, Dr. Roberts, of Manchester, formerly a distinguished pupil of this school, has made carefully conducted experiments on calculi in and out of the bladder with certain results. I give you the following brief analysis of them. He finds carbonate of potash to be the most powerful solvent: better than soda, much better than lithia. The solution must not be too strong, otherwise an alkaline biurate coats the calculus and solution is checked. The best salts to administer by mouth are the citrate and the acetate, these, as you know, becoming carbonates in the urine. The adult dose should be forty or fifty grains in three or four ounces of water every three hours—equalling six drachms daily. The urine thus rendered alkaline may become cloudy from amorphous phosphates, but this state does not hinder solution, provided the urine is not also ammoniacal; but if it becomes so, it is most important to bear in mind that all solution then absolutely ceases. Hence it is useless to attempt the solution of a uric-acid stone unless the urine is naturally acid. If the urine is alkaline before commencement it is certainly ammoniacal, and no solvent will act, as mixed phosphates are deposited on the surface of the stone. He admits that it is quite useless to attempt the solution of a large calculus of any kind, or of an oxalate-of-lime calculus; and that nothing can be done with a phosphatic calculus except by injection into the bladder. Lastly, alkaline injections of the bladder for uric-acid calculus are without efficacy. To resume; the following conditions are essential to success: certainty that the stone is of uric acid, and that it is of small size; that the urine is acid, and never ammoniacal. These extremely favourable conditions existing, the most powerful solvent known—potash—offers a fair chance of diminishing its volume considerably after a trial of several weeks, so that the nucleus may perhaps be passed by the urethra; but at present Dr. Roberts is not able to report so complete a success.†

There, that is the best thing that modern science has yet done towards accomplishing the dissolution of the stone. Then you say, Have there been no results whatever from the empirical methods you have described? Have miserable calculous patients for two thousand years been swallowing to no purpose all the nauseous mixtures described, from Pliny to Joanna Stephens, and onwards through Chittick, with his locked cans, to the nostrum dealers of our own time? I wish to give you a fair and distinct answer to that question, and will do so as far as it is in my power.

I reply, first, that there is very slender evidence as to the complete solution of a stone in the bladder by any alkaline agent. I cannot find that any case certified to have stone after sounding by a competent surgeon has, after a course of any solvent, been again sounded, or submitted to autopsy, and demonstrated to be free from stone. Less evidence than this is quite valueless. That the alkaline solutions often greatly palliate some cases, and enable some patients, but by no means all, to continue in comparative comfort without extraction by any method, I have always been perfectly satisfied. On the other hand, sometimes the freedom from pain which they produce is temporary only; and in some cases, as I have not seldom seen, the effect of the alkaline agent is to produce considerable aggravation of the symptoms. This was often observed during the "soap and lime-water" period. The degree of palliative influence,

* THE LANCET, 1854, vol. i., p. 439.

† Practical Treatise on Urinary and Renal Diseases, 1872.

however, is not the subject before us, but the question of complete solution of the stone. Morand's cases already referred to, of which twenty-two were sounded before taking the medicine, did not supply a proved example of success. Among the alleged triumphs of the lime and potash treatment, many after death were examined and found to have stones still, often numerous and large, in the bladder.* But what is more to the point is, that the four persons whose cures were certified by the trustees appointed by the Government to examine into the merits of Mrs. Stephens's remedies died, each one of them with stone in the bladder, where it was found by post-mortem examination.†

The case of Horace Walpole in the last century is well known; it was written by himself for the Royal Society. He commenced—being nearly seventy years of age—to take from half an ounce to an ounce of Alicant soap and three pints of lime-water daily for many months at a time, and with short intervals up to the period of his death at seventy-eight. He experienced great relief after taking them for a year or so, and ultimately believed himself to be cured. At his death three smallish calculi were found in his bladder. The case naturally attracted much interest at the time, and is one of the best results on record. But the fact is that the great majority of patients who took these medicines then and who take such now, are not the subjects of stone at all. They have some symptoms which resemble what they are pleased to consider calculous symptoms, and they take large doses of alkali—notoriously one of our best remedies for urinary irritations—and obtain relief. They then tell their neighbours, and often certify in print, that they have been cured of that "dangerous malady the stone." These are the great cures which the nostrum-monger relies upon. For what happens to those few of their clients who really have stone? That the stone, if uric acid, becomes coated with the biurate, which either adheres or comes away in scales, or that the urine becomes ammoniacal, so that no dissolution whatever can in either case occur. But meantime large quantities of white sediment composed of the earthy phosphates or of shell-like fragments of the biurate, to say nothing of the white granular deposit of the mixed phosphates, come away; and this the poor patient believes to be the débris of his stone and the proof of the efficacy of the solvent process! This fact exists in the great majority of cases, and is always appealed to as an infallible sign of the value of the agent! Meantime the stone is acquiring, not slowly, fresh layers of deposit, and is becoming surely larger. Such must often be the inevitable result where the medicines are empirically given—that is, without reference to the nature of the stone and the condition of the urine, and where the procedure cannot be regulated and watched on the principles laid down above. But, say you, this is a mere *a priori* statement, and looks very plausible, no doubt; but how do you know that this happens? I will give you one instance which will suffice, and will give more when required. A few years ago a man came to me from Yorkshire, who, having had symptoms of stone for a considerable time, was advised to take some well-known solvent for his malady. Accordingly he did so, and you will agree with me probably that he took enough to ensure it a fair trial, for he swallowed twenty-five pounds' worth of that very water which you see before you on the table. He was relieved, but his life was necessarily an active one, and he had not the means of repose and the luxurious surroundings which Horace Walpole had, and his stone symptoms ultimately got worse. At last he came to me and I crushed for him a large mixed calculus. Had he come to me before, it would have been a small one. The case did well, and the man lives at this day to tell the tale, and, if necessary, he is ready to tell it again.

Now, mind, I don't say that a calculus has never been dissolved, nor that it is impossible to dissolve a small uric-acid calculus by alkaline agents taken internally. I will go further and express my belief that, given abundance of time and careful supervision, it may be possible. Nay, I will do more; the first case of such a kind that comes into the hospital, the patient consenting, I shall be pleased to submit to the process, and to give it a fair trial. But this I say with certainty, that there is no evidence whatever that one case in a hundred of those who have swallowed solvents for the stone has been cured of it, during all past experience down to this day. No man who deliberately takes solvents for a calculus the characters of which have not been carefully determined can reckon on any better chance than this—viz., that it is a hundred to one against their success, and that it is probable that his stone may grow bigger meantime. And if the stone be large, the solution is impossible.

What is the value of the treatment in question? I affirm without hesitation that it is valuable, not for stone in the bladder, but for that earlier stage of the same malady—stone in the kidney. That is the period of its history in which to attack the stone by solvents. When small uric-acid calculi are passing periodically or occasionally, much may be done: first, and I believe mainly, by preventive treatment, on principles I have already explained to you in a lecture devoted entirely to that subject; and that being insufficient alone, secondly, by alkaline treatment. With these two together, there ought in time rarely to be much trouble with stone in the bladder. I confidently anticipate a future in which any severe operation for it will be rare. Uric-acid stones only, as you know, are amenable to the process, and, happily, they form the very large majority of renal calculi.

I must say a few words about agents to be used locally in the bladder for the solution of phosphatic stones which are not dissolved, but rather increased, by the internal remedies already described. This is a matter, one may say, almost of daily practice. You know that there are many patients, chiefly those who are unable to empty the bladder except by catheter, who are very prone to form calculous matter of the mixed phosphates, and this at a very rapid rate. For these persons acid solutions injected into the bladder are very valuable. The patient may be taught to do it himself; numbers have been taught in my wards. Once or twice a day, after withdrawing all the urine by catheter, he applies to the end of it a four-ounce bottle, with stop-cock, containing a solution of acetate of lead, about one-third or one-half a grain to the ounce of distilled water, or of one or two minims of dilute hydrochloric acid to the ounce. He throws in half the contents, and allows it to issue, carrying out with it some small débris perhaps. He next injects the second half, and allows it to remain there. This does much to prevent the formation of phosphatic calculus, or at all events of the aggregation of its elements in the bladder. I have no time to detail the considerable extensions of this process in the matter of quantity, &c., which are possible when more than this has to be achieved. The principle is the same, and the extension of it is easy; and I have elsewhere gone into detail in this matter.

I must not omit to name the agency of electricity which has also been locally employed, both for uric-acid and for phosphatic stones. Prevost and Dumas (1823) attempted direct solution of a stone in the bladder by the galvanic current, a plan which was more fully developed here by Dr. Bence Jones (1852). The amount of instrumental manipulation, however, necessary to bring the wires into contact with the stone and to maintain them there during the period necessary for its solution is considerably greater than that required to crush the stone by the modern method of lithotrity, and must therefore be regarded at present as inapplicable.

And now comes the inevitable final conclusion, inevitable because true. It has been shown that there is no chance for the dissolution of any but a small stone, and this provided only that it exists in the most favourable circumstances; and, lastly, that in order to accomplish the task a considerable period of time must be devoted to the process.

For such a stone, gentlemen, but one or two, rarely three sittings, by lithotrity are necessary. And, thus limited, no operation in the whole range of surgery is more certainly safe, rapid, and successful. I repeat the statement, that such a case I have never lost in the whole course of my experience. Nevertheless, let the patient's voice be heard in determining the course to be pursued. He claims the right to exercise a choice, although he may not always manifest his wisdom in doing so; but it belongs to us to give him a full view of the relative merits of both methods. What they are I have endeavoured impartially to set before you.

* Dr. James Parsons reports twelve post-mortems of Mrs. Stephens's patients who, dying, were found in that condition. "A Description," &c. London, 1742.

† Alston's Lectures in the Materia Medica, vol. i., p. 268. London, 1773. Their names were Gardiner, Appleton, Norris, and Brighty.

ON PARALYSIS, CONVULSION, AND OTHER NERVOUS AFFECTIONS IN SYPHILITIC SUBJECTS.

By THOMAS BUZZARD, M.D.,
PHYSICIAN TO THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.

(*Continued from page 336.*)

The multiple character which is so frequently to be observed in the more serious nervous affections consequent upon syphilis renders wellnigh impracticable any attempt to group these in distinct classes. Convulsion may be met with alone, or combined with paralysis. One or more cranial nerves may be paralysed independently, or in association with hemiplegia. Paraplegia may be an isolated phenomenon, or along with it there may be paralysis of one or both upper extremities, or of one or more cranial nerves. Impairment of the mental faculties may be conjoined with one or several of these conditions, or may be entirely absent. Under these circumstances, it will be most useful probably if, in the necessarily small space which these communications can occupy, I limit myself to describing the salient points of a certain number of the cases which have occurred in my practice, without attempting any serious classification. These will serve to illustrate generally the variety of conditions which may be met with, as well as the circumstances of the patient's health and previous history under which they have been found to occur. Most of the examples adduced will also help to show, what I have already insisted upon, that the syphilitic element must be sought for in such cases by the medical attendant himself, as in the very large majority it will form no element in the patient's voluntary account of his history, and in many instances will fail to betray itself by any signs evident to the eye.

A wife, aged thirty-four, was carried into the hospital consulting-room with complete paralysis of the right arm and leg and right half of the face, ptosis of the right eyelid, traction inwards of the right globe, which could not be turned outwards beyond the middle line, and not at all upwards or downwards, dilatation of the right pupil, some loss of sensibility in the face, and to a less extent in the limbs of the right side. There was thus, besides the condition belonging to ordinary right hemiplegia, paralysis of the third, sixth, and partially of the fifth nerves. It seemed that three months previously her right eye became turned inwards gradually. Two months afterwards, on rising one morning, she felt a numbness of the right half of the face and right extremities; and a fortnight after this she rapidly lost the power of moving the right arm and leg. Her speech, too, became indistinct. The arm, a few days before she applied at the hospital, became rigidly contracted, the leg remaining limp. The sight of the right eye was very imperfect, and the ophthalmoscope showed partial atrophy of the disc. Before her attack of numbness she had suffered for some time from great pains in her head, worse at night. On inquiry I ascertained that she had been married eight years, had produced two still-born children, and none living at birth. Her husband, whom I sent for, presented on his forehead a large patch of serpiginous ulceration which had existed, he said, for two years. *He* acknowledged that ten years previously he had suffered from a sore which had been followed by spots on the skin. *She*, however (and this is interesting), utterly denied having ever had a skin eruption or sore-throat; and asserted that she had enjoyed excellent health until this attack, and had been, indeed, a very active person. She presented no cachectic aspect, and said that she slept well and had a good appetite. She had no signs of disease of the heart, bloodvessels, or kidneys. She was treated with ten-grain doses of iodide three times a day for two months, and then she walked fairly enough with a stick, and reported herself as very much better in every respect except that she could not move her arm. Unfortunately, at this point my notes are defective, so that I am unable to give details of her improvement, and she does not appear to have attended again at the hospital. Even with this drawback I record the case, as it is one eminently characteristic of syphilitic lesion, and illustrating many points of importance, not the least being the existence of grave intracranial lesions in a person who showed no other external sign of syphilis, and who denied that any of the more common symptoms had ever occurred. The evidence, indeed, may be said to be entirely circumstantial, but it is nevertheless convincing.

About the same time another wife, aged thirty-two, presented herself with the following story:—Nine weeks before she had felt one day that she could not get her words out, then lost her speech altogether, and had a jerking in the fingers of her right hand for two hours, during which she did not lose her senses. Then she managed to articulate some intelligible words, but an hour afterwards she felt something run up her right leg, "just as if the dog had run up it," and an indescribable sensation took her in the right hand and right eye, which severally jerked and quivered, and her teeth chattered; the whole phenomena lasting about fifteen minutes. These fits, always without loss of consciousness, were repeated at short intervals for two or three hours. Then she appears to have received some very appropriate treatment (iodide and mercury), and the fits left her for two months, when they returned (I think after discontinuance of the remedies), and she came to the hospital. Her aspect was not unhealthy. I found the scar of an ulcer at the junction of the hard and soft palate, and she acknowledged that there had been an aperture at that point for some months, which closed under the specific treatment. Five years previously she had noticed spots about her, and had suffered from sore-throat. For three months before the fits she had experienced dreadful headache, worse at night. She had produced six children, of whom only one survived. The other five had died of "teething" or "consumption," all at about fifteen months old. She had besides miscarried twice. The living child had suffered from a sore under its arm. I gave her large doses (fifteen and twenty grains) of iodide for six weeks, and she had no recurrence of fits. Then I lost sight of her.

Another wife, aged thirty-seven, of whose case I find a brief note, had ptosis of the left eyelid, dilatation of the corresponding pupil, imperfect left hemiplegia, with numbness of the left side of the face, imperfection of taste and smell, and sluggish action of those recti muscles which are supplied by the third nerve. These symptoms were quite recent, but for five or six years she had been liable to faint away once or twice daily. Fourteen years previously she had a chancre, and for five or six years afterwards she had annually a bad sore-throat lasting some weeks. She had produced six children, of whom three had died in fits or "consumption," and one, then living, at six weeks old had developed an eruption on its face which lasted three months. She herself had never seen any spots on her skin.

Another wife, aged thirty-four, who applied at the hospital, had suffered from "congestion of the brain" twelve years previously, and was quite out of her mind for some weeks. This was followed by fits, which recurred at intervals of a few weeks for six years, and afterwards with longer delays, till, two months before I saw her, she began to get constant shaking of the left limbs, with occasional fits. She had been quite well before her marriage at twenty years of age. She had produced one living child, which died at four months of "bronchitis"; and had miscarried six times. She had suffered from breaking out of pimples on her back and chest, and had frequently had sore-throat, lasting two or three weeks, and dreadful headache, increased at night.

A man aged forty-three had a succession of fits for several days, eventuating in maniacal excitement, about nine months before his application to the hospital, and since then two at a few months' interval. I found the right angle of the mouth lower than the left, and the grasp of the right hand feeble. He reported that about nine months before his fits began he had suffered from bad eyes and had been blind for three days. Nineteen years previously he had been affected with chancre and indurated bubo, which were not followed by sore-throat or general skin eruption. He showed me a patch of squamous eruption on the scrotum, which he had had for a very long time. Great pains in the head had preceded his fits. He improved at first very much under

specific treatment, and the grasp of his right hand was quite restored to its normal power; but after some months I learnt that he had lost the use of both legs; and as there was no room for him in the hospital, and he could not attend, I saw no more of him. His domestic history was this: Married six years; wife had miscarried twice, and had produced, besides, four children, of whom one was still-born, one died in convulsions at four months, and one at a few months of diarrhœa; the living child had "a very large head, and was liable to a screaming cry of very peculiar kind."

These few examples—and they are types of a class which is common enough—incidentally throw a strong light upon the probable cause of a vast amount of the early mortality in children from fits, so-called "teething" and "consumption." There can be, I think, but little doubt that the syphilitic element inherited from the parents often plays a most important part in the production of these conditions, and that this is very frequently overlooked. As regards the pathology of these particular cases, the result necessarily leaves this in some doubt. In the first case, however, there is evidence of tumour, but whether of gummatous or simple hyperplastic character is quite doubtful. In the second the concurrence of perforation of the palate (a tertiary lesion) would point to the probability of a gummatous intracranial formation, and so, perhaps, would the long duration of the disease in the third case. In the fourth and fifth it is probable that there was more or less diffused inflammation of the inner cerebral meninges leading to the "congestion of brain" and maniacal excitement which is noted in these cases, and to exudation and subsequent thickening of the membranes in certain parts.

The tendency to relapse which characterises syphilitic affections of the nervous system frequently lends important aid to their diagnosis. In the histories which I have hitherto related this peculiarity has not been prominent, for reasons easily explained. Either sufficient time has not yet elapsed since they were observed and treated for this tendency to manifest itself, or the sufferers have been lost sight of after more or less complete recovery of health, and their subsequent history remains unknown. In the case last mentioned, however, it will be noted that after recovery from hemiplegia the patient became paraplegic. The subjoined instances are examples of relapse after intervals of various duration, and on this account are worth noting. It may be said generally that paralyses of motion in early middle life (if not of hysterical origin) which are characterised by repeated relapses after prolonged intervals of immunity, point almost conclusively to a syphilitic basis for their origin.

A single man was attacked at twenty-five years of age with a "stoppage" in his bladder and rectum, associated with great numbness and loss of power in his legs, so that he could scarcely stand. He was laid up in bed for two or three weeks, and was about four months altogether in recovering. Nine years afterwards, having remained well in the interval, he presented himself at the hospital, exhibiting almost complete paraplegia, with greatly impaired cutaneous sensibility of the lower limbs, having sometimes long delay in passing his urine, and occasional incontinence both of urine and fæces. He could not stand. He had suffered in early life (date unknown) from a discharge. At twenty-three he had dimness of sight in both eyes, for which he was treated at an ophthalmic hospital. The left eye recovered, but the right did not, and with it ever afterwards he could only distinguish light from darkness. He denied having ever had sore-throat or eruption on his skin. I found a scar as of old ulceration on the inside of one of his legs, and in the right eye the ophthalmoscope showed numerous small pigmented patches as of old choroiditis.

A man when twenty years of age had a sore, not followed by secondary symptoms. At twenty-nine he had a chancre, succeeded, about a year afterwards, by "something wrong with his skin, eyes, ears and lips." At thirty-nine he got a weakness in his legs, which became gradually worse for two or three weeks, so that he could not stand. As he lay in bed he could not draw up his feet, and he completely lost sensibility in his legs. There was nothing wrong with his bladder or rectum. He lay in this powerless state for a week, and then got cramps in his legs, which "started" of themselves. His illness lasted for a month or so. He had received no injury, and was unable to refer his condition to any cause. At fifty-seven he felt one day a strange sensation in his legs, especially the right, then a "weariness," lost his senses for a moment, but was not convulsed, and found himself paralysed in the limbs and face of the right side. In this state I saw him at the hospital two months afterwards, and gleaned the above particulars of his history. He described a state of aphasia which had accompanied his attack, but had nearly passed away, though he still found himself at times somewhat deficient in power of expression. There was nothing apparently wrong with the kidneys, heart, or bloodvessels. Under specific treatment for a month he improved, and then, as too frequently happens in hospital practice, he ceased to attend.

A wife had partial left hemiplegia at thirty-eight years of age. At forty the attack was repeated, this time with epileptic symptoms. At forty-six she had an attack of right facial paralysis, and a few days afterwards a third paralytic seizure on the left side. Violent headaches preceded each attack. She had suffered from bad ulcerated throat and skin eruption, had miscarried twice, and had lost the two children to whom she had given birth.

I saw on one occasion only, a few years ago, a military man, aged thirty, whose symptoms were prolonged insomnia, weariness, pains of long standing in both lower extremities, and who, seven years previously, had been affected with a sore, accompanied by a bubo, which suppurated. He told me that whilst under treatment for this he had an attack of left hemiplegia, together with paralysis of the left upper lid, so that his eye was closed, and that from this illness he recovered in about a month. He had never had sore-throat or eruption of the skin. I could find nothing wrong with his circulatory apparatus or kidneys. He had not been exposed to the action of sunstroke. Early as was this attack—earlier, indeed, than in any case which I have verified for myself,—the history leaves little doubt of its syphilitic origin; and also I think that his later symptoms, which arose after an interval of four or five years, must be referred.

(To be continued.)

A CASE OF ABSCESS IN THE BURSA UNDER THE TENDON OF THE ILIACUS INTERNUS MUSCLE.

BY WILLIAM ROSE, M.R.C.S.,
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THE following case, which occurred in King's College Hospital, seems worthy of record.

William B——, aged twenty-eight, a thin, pallid-looking man, states that he sprained his left hip two years ago, when only just convalescent from typhus fever. He could not walk without great pain, and six weeks after a swelling formed about the left hip, which showed signs of fluctuation, and had a tendency to point in front of the joint, and also behind it below the edge of the gluteus maximus. Being at that time looked upon as a gluteal abscess, it was opened, where it pointed behind; but afterwards, when the opening had closed, another was made in front. No considerable escape of pus ever took place, and after a period of about six months the pain and discharge became less, and he was enabled to walk short distances.

On his application at the hospital there was a sinus situated in front of the upper part of the left thigh, one inch external to the course of the femoral artery, and four inches below the anterior superior iliac spine, along which a probe could be readily passed for a distance of about six inches upwards, and slightly backwards beneath the tendon of the iliacus muscle, touching bare bone posteriorly at the pelvic brim on its way to the venter of the ilium. The discharge was cream-coloured, and rather thin. The patient has noticed on one or two occasions what might have been minute particles of necrosed bone coming from the wound. He cannot straighten the thigh like the sound one owing to a well-marked increased tension of the combined psoas and iliacus tendons.

Oct. 16th.—The patient was placed under chloroform, and the opening of the sinus was dilated with a probe-

pointed bistoury, and the finger introduced. The bone was then found to be bare, but not dead, just at that part of the brim of the pelvis over which the tendon of the iliacus passes. Mr. Wood then proceeded very carefully to make a counter-opening at a point half an inch below and internal to the anterior iliac spine, the pulsation of the deep circumflex iliac artery being plainly felt along the outer wall of the counter-incision. A large-sized drainage-tube was passed through the openings, and water-dressing applied.

22nd.—Discharges freely; the wound to be injected with the following solution:—Carbolic acid, half a drachm; phosphoric acid, one drachm; nitric acid, one drachm; water, ten ounces. This Mr. Wood has used with great benefit for some time in the hospital in cases of sinuses leading to bare bone.

Nov. 20th.—A small piece of necrosed bone about the size of a bean came away, apparently a portion of the inferior iliac spine.

25th.—Slight hæmorrhage from lower opening, soon stopped.

Jan. 3rd.—Drainage-tube removed; very slight discharge; can straighten the limb almost as much as the other.

23rd.—Patient left the hospital with a small sinus still remaining. To come as out-patient.

He has since come again for examination, looking much better for the change. Sinus still discharging; probably some small pieces of bone still to come away. Can walk moderately well.

In all these cases of suppurative mischief about the hip it is often not easy to arrive at a correct diagnosis, and it is at the same time very important to do so. Mr. Wood looks upon this case as originally one of inflammation and suppuration of the bursa placed under the iliacus internus muscle as it passes over the brim of the pelvis, leading on to inflammation of the adjoining periosteum, and slight superficial necrosis of the adjacent bone. The pus thus formed seems to have made its way along the course of the iliacus tendon down to the region of the lesser trochanter; it then appears to have taken two directions, one backward through the opening between the attachments of the quadratus femoris and adductor magnus, and to have pointed below the edge of the great gluteal muscle (in this way it seems at first to have been treated for an abscess under that muscle, and here it was originally opened by the surgeon), the other forward to the front of the thigh outside the femoral vessels, where the second opening was made previous to the patient's admission. The hip-joint was perfectly movable, and free from grating, pain, or tenderness on percussion over the trochanter.

GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Session 1873.

THURSDAY, MARCH 27TH.

THE Council assembled at 2 o'clock; Dr. Paget, President, in the chair.

The first hour of the sitting was spent in the consideration and confirmation of the Minutes. In the course of this proceeding Dr. PARKES called attention to a statement with reference to an "entrance examination" at the Queen's University of Ireland, and objected to the accuracy of the statement, there being, as he said, no such entrance examination at the University, notwithstanding the requirements of the Council. After some discussion, Dr. ANDREW WOOD expressed his intention of bringing forward a motion on the subject.

The debate arising out of the correspondence between the Government and the Society of Apothecaries was then resumed.

Mr. BRADFORD handed in some letters to complete the correspondence, and a copy of a Bill proposed by the Society of Apothecaries. The objects proposed by the Bill, he said, were (1) to obviate the necessity of the Society's candidates undergoing an apprenticeship, (2) to enable the Society to select examiners from registered medical practitioners at large, and (3) to enable the Society to strike off its list of licentiates persons guilty of infamous or disgraceful conduct.

Dr. PARKES made the following statement on the authority of Dr. Carpenter, the Registrar of the University of London. A few weeks ago the University received a letter from Sir James Paget, chairman of the Committee of Reference, asking what it had done with respect to the enabling Bill. The Registrar thereupon went to the Home Office, where Mr. Winterbotham informed him that Lord Ripon would introduce an enabling Bill in the House of Lords and endeavour to get it passed, but only on two conditions—first, that the fees of the candidates should not be raised without the sanction of the Privy Council; and, secondly, that the rules of the various conjoint boards, when framed, should be submitted to the Privy Council for approval. These two conditions were in some way brought under the notice of one or two of the English universities, and the Home Office was informed that they were not acceptable. The Registrar believed that, on the intimation being given, Lord Ripon decided to drop the Bill.

Sir W. GULL referred to the statement of Dr. Alex. Wood and Dr. Andrew Wood on the previous day—that it would be premature to wait on the Government without a further consideration of the subject on the part of the Council; and called upon those gentlemen to give the Council the benefit of their views.

Dr. ALEX. WOOD denied that the remarks he had made cast upon him the responsibility of taking the initiative in the discussion, and declined to take that course.

Sir WM. GULL then moved,—"That the President of this Council and four members of it be appointed a deputation to wait upon the Government to ascertain whether they are willing to aid the Council in the removal of any legal difficulties that may exist in carrying out the objects of Clause 19." He said he was sorry to find that the gentlemen who had obstructed the movement of the Council were now trying to obstruct it still further. The time of the Council was being wasted. The general sense of the Council in favour of a conjoint examination had been already clearly expressed: the Universities of England, without exception, desired to carry out such a scheme; the Colleges of Physicians and Surgeons had taken steps in the preparation of a scheme; and the Society of Apothecaries desired to take part in it. Yet they were told by their friends from Scotland that they had taken no steps in the matter. This, he contended, was mere trifling, wasting the time and the funds of the Council, and disappointing the hopes of the profession. He (Sir Wm. Gull) had no interests to consider but those of his profession, and had nothing to do with any corporate body. It was very doubtful whether the universities would not carry on their schemes of education better if they were relieved of the task of granting licences. A minimum standard was required for men to supply the public wants, but not for the advancement of science. He was astonished at the course taken by Dr. Alexander Wood and Dr. Andrew Wood, who, he thought, must have some *arrière pensée*.

Mr. HARGRAVE seconded the motion.

Dr. ALEX. WOOD said he had no desire to take offence, but he denied the imputations of Sir Wm. Gull; and he wished to remind the Council that years ago a conjoint board was formed in Edinburgh.

Dr. ANDREW WOOD protested against the charge of obstructiveness being brought against members of the Council who did not happen to agree with a proposed course of action. The question was now in a different position from that which it occupied last year. Two important bodies had been left out of the conjoint scheme, and the Government (which had been always held up as the *bête noire* if the Council did not agree to a conjoint scheme) had distinctly refused to sanction a Bill to enable them to join in it. He was astonished to find that the Government wanted to bind them neck and heel to the Privy Council, and to deprive them of the power of regulating the fees taken for diplomas and adopting regulations for education and examination unless approved by the Privy Council. If he (Dr. Andrew Wood) had objections before, he had still more after the important revelations that had been made, especially after the statement of Dr. Storrar that Mr. Forster was afraid, in the event of a conjoint scheme being adopted, lest the country should not be sufficiently supplied with general practitioners.

Dr. STORRAR.—Unless there was a guarantee to Government as to the fees and the nature of the examination.

Dr. ANDREW WOOD.—Then were those members of the Council to be considered as "obstructives" who objected to bend the knee at the feet of the Privy Council, or virtually at the feet of the medical adviser of the Privy Council? He, for one, was not content to do so, and he would rather bear the ills he had than fly to others that he knew not of. The members from Scotland who had been so much abused were able to judge for themselves, and did not choose to take the *ipse dixit* of any man, even the highest in the profession residing in London. They went down to Scotland loyally anxious to carry out a conjoint scheme. Many conferences were held on the subject, but the more they discussed the subject and considered the practical difficulties in the way, which were of a serious character, the more they became convinced, not only that by adopting such a scheme they would be sacrificing their own independence, but that it would not be for the benefit of the public. By placing the universities and the different bodies on one dead level like Salisbury plain they were more likely to lower than to raise the education of the country. It might be asked, were they going to continue a system under which competing bodies sent out incompetent men? His reply was, if there were any of the bodies under Schedule A of the Medical Act who were sending out unqualified men, the fault lay with the Medical Council, which had the power to depute persons to visit the examinations, and to require any deficiencies to be remedied. It was shown by a table laid before the Council, that in all the bodies, without exception, the proportion of rejections was appalling; and it was evident that the qualifying bodies were doing their utmost to keep out incompetent men from the profession. It used to be said that when the candidates sent out appeared before the Army Medical Board a large proportion of them were rejected. The number of failures, however, had been gradually diminishing, and it appeared from the return just presented that at the last examination out of nineteen candidates only one was rejected. Was not this satisfactory evidence of progress, even without the aid of conjoint examining boards? He (Dr. Andrew Wood) had been a practitioner for forty years; during that time he had been brought into contact with men in town and country, and he stated deliberately that there had been great improvement among them. In the most out-of-the-way parts of Scotland there were men from whose opinion he (Dr. Andrew Wood) would derive the greatest assistance. He believed that this improvement was, in a great measure, attributable to the operation of the Medical Act, and the action of the Medical Council—the despised body that was said to be idling away its time. No person could now become a medical student without going through a preliminary examination; and in that way many uneducated persons had been debarred from entering the profession. It had been also made imperative that the curriculum of professional studies should be prolonged. The Council had never made a suggestion, perhaps with one exception, to any of the medical bodies which they had not carried out. Under these circumstances, considering the difficulties that had been found in England, where two bodies were left out of the scheme, the difficulties in Ireland, where also two bodies were left out; and considering especially the difficulties in Scotland, where there was only one body that was at all sincere in the desire to have a conjoint examination scheme, the Council, if it continued to make an attempt to carry out what he believed was impracticable, would be wasting a great deal more time than any of those who were termed "obstructives." The Council would do a great deal more to advance the interests of the profession if they would abandon this chimera, this *ignis fatuus*, which had been leading them on, and had landed them at last in a bog.

Dr. PARKES said he supported Sir William Gull's motion, but he thought it extremely desirable that the Council should know what answer the deputation would give to the inquiries of the Lord President. The first question which he would probably ask was, whether any assurance could be given that the various bodies would take advantage of the enabling Bill which was required—whether the Government might be assured that it would not have its pains for nothing. In the speech which had just been delivered, and the various communications which had been laid before the Council from the various bodies in Scotland, could the deputation reply to that question in the affirmative? Could any other answer be given than this—that it was certain that two English bodies would avail themselves of the provisions of the Bill, and that it was uncertain that any other body in Scotland or Ireland would do so? Then the Lord President would ask what was the use of a Bill to accomplish so small an object; and what would be the reply to that inquiry? He (Dr. Parkes) listened with admiration to the speech of the President on the previous day, and especially to that part of it in which he expressed a hope that conjoint boards would be established. It was like the spectacle of a good man struggling with adversity. He thought that if the plan were adopted in England it would be a great example to the other bodies in Scotland or Ireland, and that at length the opinion of the public at large and the profession would be expressed in favour of the scheme, and that this would have a decided influence on the various educational and licensing bodies. But would not the Lord President ask what had been the influence of England on the various bodies in Scotland and Ireland up to the present time? It had had no influence at all, and never would have. England might go on as it pleased, Scotland and Ireland would continue to take their own course. With regard to the opinion of the profession, that had been already strongly expressed in favour of consolidated boards. As to the public, the Lord President would probably say that the mode in which public opinion exerted itself was by legislative action; and "Do you wish," he would ask, "for some enactment which will regulate the whole of this matter?" He would require to know whether the Council desired an Act of Parliament to compel the formation of joint boards—in other words, whether he should again introduce, perhaps in some modified form, the Bill which was introduced before, and which fell through, he believed, in consequence of the opposition of persons who wished to change the character of the Council, and who organised at the last moment a strong opposition to the Bill in the House of Commons unless they could obtain the provisions they were seeking. Under these circumstances, it was necessary that the deputation should have definite instructions before waiting upon the Government. The Council had again and again affirmed the principle of conjoint boards, and it was impossible to withdraw from that position without some very good reason for it. With all respect to Dr. Andrew Wood, the reasons he had given had not produced the slightest impression upon him. The Council should affirm that they were determined to go on in the matter, and the President should have authority to state that they were prepared eventually to beg the Government to adopt measures for introducing an Act for the fresh regulation of medical education and examination in case the various bodies of the kingdom did not unite of their own accord.

Sir D. CORRIGAN said he was painfully astonished at the tone assumed by Sir William Gull in the observations he had made. Very warm discussions had taken place at the Council, and he himself had taken part in some of them. But that was the first time he had heard it attributed to any members of the Council who took a particular view of a subject in opposition to that of the speaker, that they had an *arrière pensée*—that they were actuated by unworthy motives.

Sir WM. GULL.—I said nothing about unworthy motives. The *arrière pensée* may be a worthy one in their estimation.

Sir D. CORRIGAN.—The assumption was, that the persons who took a particular view of the resolution proposed, one of whom I was, were actuated by a thought or a motive that was not fit to be in the light, and that they were ashamed to bring forward.

Sir WM. GULL.—No, no.

Sir D. CORRIGAN.—That is my translation of the words *arrière pensée*.

Sir WM. GULL.—A thought they did not wish to express.

Sir D. CORRIGAN.—It is something behind that you are ashamed to bring forward. This is the first time that ever I heard such a phrase applied to any member of the Council.

Sir WM. GULL.—I must not have notions attributed to me that I never had in my mind. What I meant to express was, that these gentlemen sitting here may have thoughts which are behind the thoughts that they express, whether good or bad.

Dr. ALEX. WOOD.—I repudiate such dishonesty, for that is the only English word that can express it.

Sir D. CORRIGAN hoped that such observations would not be repeated. With regard to the responsibility of initiating the discussion, he maintained that that rested upon Sir Wm. Gull, who had himself proposed that the first business of that day should be the consideration of the correspondence between the Government and the Society of Apothecaries. Dr. Parkes had said that Ireland would continue to go on its own way. He (Sir D. Corrigan) sincerely hoped that, in some respects at all events, it would not imitate England. Allusion had been made to the great moral effect of England in pushing forward a conjoint scheme. He should be glad to know where the conjoint scheme of England was to be found.

The PRESIDENT.—In the Minutes of last year.

Sir D. CORRIGAN.—Communications had been received from Scotland and Ireland expressing approval of the scheme or dissent from it, but no communication whatever had been laid before the Council from England, and yet they were told that they were to be governed by the moral effect. England! What had been the moral act of England? To do nothing.

Mr. QUAIN said it was unnecessary for bodies who were actually engaged in carrying the scheme out to make any communication on the subject to the Council. When the scheme was in operation the communication would doubtless be made.

Dr. BENNETT said that the Council had already accepted the English scheme.

Dr. ANDREW WOOD.—It is not in operation.

Mr. QUAIN said that the scheme would only affect students who began their course next October, and when they had passed their examination the Council would hear of it.

The PRESIDENT said that Dr. Alex. Wood had placed in his hands the following resolution:—"That the Council find that several unexpected difficulties stand in the way of forming conjoint examining boards in the three divisions of the kingdom; that it appears that no such combination can be legally formed without an enabling Act of Parliament, which the Government are unwilling to introduce except on conditions which will imperil the independence of the profession; that under these circumstances the Council consider it would be inexpedient at present to press conjoint schemes; and that the Council resume the visitation of examinations with the determination to improve existing examinations wherever they may seem to require it."

Dr. BENNETT maintained that a considerable advance had been made in England, inasmuch as a scheme had been prepared and approved by the Council, and was being worked out by the most important bodies in that division of the kingdom. Whatever difficulties were in the way, the scheme would be brought into operation towards the close of the year. It seemed manifest that in their present position there was nothing for them but to adopt the motion of Sir William Gull and to ascertain from the Government what their views were with reference to this matter. The Council had had no definite communication from the Government on the question. If they were informed that the Government was not prepared to remove the difficulties in their way except on conditions that they could not consent to, they would then be in a position to consider whether they should not advise some other mode than the conjoint scheme. But in the meanwhile they were bound to carry out the principle which they had affirmed over and over again. They were extremely unwilling to abandon it after all the time and labour they had bestowed on it. The attention of the Government should be especially called to Clause 19 of the Act, which gave them power to combine for such a purpose. If the Government said that the clause did not give them that authority, that would be cutting from under them the ground on which they had hitherto proceeded.

Dr. STOKES said that the bodies in Ireland that had agreed to unite were the University of Dublin and the Colleges of Physicians and Surgeons. The Queen's University had not joined them and the Apothecaries' Company had separated from them only upon a trifling point—the position of their representatives at the examination. Under these circumstances it might be safely said that Ireland had done its duty in furthering the scheme of conjoint boards.

Dr. QUAIN said he wished to know who it was that desired an enabling Bill, and what was the meaning of such a Bill? The University of London could take care of its own interests, and the Apothecaries' Society had taken a very proper and judicious course to enable them to accomplish what they wanted, and they had received a decided answer. Were there any other bodies that wanted an enabling Act? Should the Council ask the Lord President for an Act of Parliament to enable those two societies to unite in the conjoint scheme proposed for England? If the Bill was one for enabling the Medical Council to compel all the bodies in the kingdom to form a conjoint scheme, he should call it an enabling Bill; but he thought it mere trifling to ask for a Bill enabling two bodies to unite in such a scheme.

Dr. HUMPHRY said that the Government, in one of their early communications with the Apothecaries' Society, stated that they were not disposed to introduce an enabling Bill, but if such a Bill were brought in by private members they would heartily support it. When the Apothecaries' Society produced their Bill, the Government said that they contemplated bringing in a Bill, upon which the Society ceased their efforts. Afterwards the Society again applied to the Government, who stated that they were not disposed to bring in an enabling Bill; but they were silent on the question of whether they would support or oppose such a Bill. The information desired was what course they would take in that respect. It was not desirable to imperil the profession by placing it too much under Government control. The various bodies of the country should as far as possible retain their independence.

Dr. ACLAND said it was a fine thing to talk of independence if you had it, but not so if you were conscious that you had none. It seemed of very little use discussing the matter when they knew perfectly well that they were mere tools, and that there was some, not *arrière pensée*, but *arrière pouvoir*. He wanted to know what that *pouvoir* was, whether it was real or not, and whether the Council was an independent body or was not. The profession from time immemorial had managed its own affairs, and the science and practice of medicine were now very different from what they were two centuries ago—but no thanks to the Government for it. The Medical Council was a more permanent body than most Governments, and was not indebted to any particular minister, who held office no longer than the country allowed him. The Council had a plain duty to discharge to the profession, and they were not to be deterred by any political parties or combinations whatever. The question was whether they were to work in fetters or not. They were endeavouring honestly to carry out the project before them, and practically they were told—"You may combine if you will submit yourselves in this, that, or the other particular; if not, we hold you in our hands." What was the fact in England? Everybody that could combine had combined.

Dr. STORRAR.—And the other two want to combine.

Dr. ACLAND said they were told that their efforts had produced no fruit. He was very sorry for it. He repeatedly came up to London to assist his friends in the completion of the scheme, and was sorry to hear it insinuated that nothing had been done, and that England was not ready. He maintained that the scheme was practically complete, and that the Government was bound to render them its assistance in bringing forward a Bill to remedy an acknowledged deficiency. The Council ought to know from Mr. Lowe whether they had been misinformed when they were told that he was willing to assist them in passing an enabling Act. Could Dr. Storrar give any information on the subject?

Dr. STORRAR said he had no information to give upon the subject. The University had had no communication with Mr. Lowe since the question was under the consideration of the Senate last year, when he was most prompt in his expression of readiness to assist.

Dr. ACLAND said that information was sufficient for his purpose with regard to England. With reference to Ireland, they were informed that three bodies had combined, and a fourth merely withdrew in consequence of a trifling matter—the position of its professors in the examination.

Dr. LEET said that the Apothecaries' Society in Ireland were exceedingly reluctant to withdraw; but they did not think the matter that influenced them a trifling one.

Dr. ACLAND inquired if Sir Dominic Corrigan could give the Council any information as to the reason which prevented the fifth body in Ireland from joining.

Sir D. CORRIGAN said that the legal gentlemen in the

Senate of the body in question differed in opinion as to whether the university could or could not join in the scheme. There was no unwillingness on the part of the university. The gentlemen who were asked to join the committees from the other bodies declined to act again, on the ground that they saw no prospect of the solution of the difficulties that presented themselves, and the Senate then resolved to hold themselves aloof, until they saw a complete scheme of education before them from the other bodies, and when that was before it, they would give it their consideration. The matter of difference was not a trifling one, but was considered to be of an irreconcileable character.

Dr. ACLAND said that at all events a majority of the members agreed to unite, and the others agreed conditionally. As to Scotland, he did not know whether the difficulties were difficulties of willingness or of conviction. Under present circumstances it was necessary before proceeding to any further discussion to ascertain, once for all, whether the conditions of the Government were absolute: meanwhile they were in a perfect fix, and able to do nothing. As to the proposal for resuming the visitations of examinations, he considered that the question had gone out of that stage. The Council had expressly affirmed the desirability of conjoint examinations, and it had a serious duty to perform in carrying that principle out. The Council was not dead, and if, under the new circumstances in which it was placed, it sought to do what was right, it would stand well with the public, and be doing its best for the advancement of the profession. There was, of course, no compulsion to be exercised on the Irish and Scotch colleges, and he asked their assistance in ascertaining from the Government whether the power that was sought was to be afforded. If the Scotch members should adopt another system, they would be at liberty to do so.

Dr. A. SMITH inquired whether the University of Oxford had accepted the proposed scheme for England.

Dr. ACLAND said that he had been directed by a special vote of Convocation to assist in the preparation of the scheme.

Dr. ALEX. WOOD, in moving the amendment read from the chair, appealed to the members of the Council whether any single act of his, since he had had a seat at the board, had savoured of obstruction. At an early period of the history of the Council he heard Sir Benjamin Brodie declare it as his opinion that the great want of medical education was, not so much medical teaching or examination, as a preparation of the mind of the student to receive the education and the training essential to his profession. From that time he had done his best in the Council to improve the preliminary education of the medical student; and if the Council had done nothing more than what it had accomplished in that direction, it would have earned a deep debt of gratitude from the profession and the public. With regard to Clause 19 of the Medical Act, he believed the general interpretation of it had been, that it enabled a person to be registered upon two qualifications without undergoing two separate examinations. The College of Surgeons and the College of Physicians might, under that clause, combine, and so be enabled with one examination to confer two qualifications. He believed that there was no other sense in which the clause could be rightly understood. In accordance with that view, the College of Physicians and the College of Surgeons of Edinburgh did combine for the purpose of conferring a medical and a surgical diploma under one examination. When the matter was brought before the Council there was not a single voice raised to dispute the interpretation of the clause which he had mentioned, and there was no desire expressed for many years for any such general combination as that which had recently been expressed.

Dr. ACLAND said that twenty-five years ago he published a document recommending a junction of the universities with the medical corporations.

Dr. ALEX. WOOD said that he was referring to the discussions in the Council and to the interpretations which had been uniformly put upon Clause 19. The question under consideration was whether it was desirable to go to the Lord President of the Privy Council, and ask him to promote a scheme in a certain definite way, or whether they were to go and ask him his intentions and his opinion on things in general. The friends in England had been exerting themselves, in the face of no common difficulties, to accomplish the union which they considered desirable. In Scotland the members had done their best to persuade the various bodies to agree to a union, because they desired to consult the wishes of the majority of the Council on the subject. The friends in Ireland had been attempting a similar course of procedure, and he regretted that any taunts should be thrown out, as if the three divisions of the kingdom were set in opposition to one another. The English bodies, who found a difficulty in the way, had very properly put themselves in communication with the Government, and they had received a pretty plain answer. An invitation had been given to them to come forward and bow the neck that the yoke might be put upon them, and give up the independence which no other learned profession had surrendered. The Church and the Law had managed their own examinations and admissions, and had never allowed the Government to interfere with or control them in any way. The great object of the Government seemed to be to have the whole education of the country under a Government department—to have a Minister of Education appointed, who should control not only general but professional and scientific education. He was opposed to any negotiations on the subject with the Government, for when once they were begun, notwithstanding all the talent and prudence of the President, he would be placed in a false position, and every step he took would be a step hurrying the profession nearer and nearer to the loss of its independence. They were not tied to one course of action, as Sir William Gull seemed to suppose. Let them endeavour to bring their examinations up to a proper standard, and he believed that course would be far more effectual than any such attempt as they were now making to grasp shadows.

Dr. FLEMING seconded the amendment. He thought it would be a great mistake to enter into negotiations with the Government as proposed.

Dr. SHARPEY said he could not vote for the amendment, as he thought that some definite instructions should be given to the deputation, so that their labours might not be thrown away.

Dr. A. SMITH suggested to Dr. Alex. Wood to withdraw for the present that portion of his amendment relating to the visitation of examinations.

The PRESIDENT said that it was competent for the Government to claim the right of saying,—"Your degrees shall not give the right to practise, unless on certain conditions." But it was a very different thing for the Government to say,—"You shall not grant degrees except upon conditions imposed by us." He could not, however, vote for the amendment, which spoke of conditions imperilling the independence of the profession, because at present the Council had no authoritative statement of what the conditions of the Government were.

Dr. APJOHN thought it unnecessary to make any application to Government.

Dr. MACROBIN suggested that it would be far better to adopt a scheme in which the corporations might unite so as to grant a double qualification instead of a single one, and in which the universities might have assessing examiners common to all, who would be able to see that one university did not give an inferior examination to another.

The debate was adjourned at the rising of the Council.

FRIDAY, MARCH 28TH.

Dr. PAGET, President, took the chair.

Dr. ALEX. WOOD asked permission to make an alteration in his amendment, and to omit the words "on conditions which would imperil the independence of the profession." When he drew up the amendment he said he was under the impression that that was distinctly brought out in the correspondence; but it had been pointed out to him by several friends that it did not so appear in the correspondence, but was a mere statement of a member of the Council. It would not, he thought, be in accordance with the usual practice or with the dignity of the Council to act upon such a statement.

After a short discussion, the Council declined to give Dr. Alex. Wood permission to alter his amendment.

Sir ROBERT CHRISTISON said he wished to lay before the Council a statement of the difficulties in Scotland that stood in the way of a general scheme such as that proposed. From the first he had had his doubts about the prudence of

such a scheme, but members of the Council had mounted their steed, and he felt that it was in vain for him to place any obstacle in their way, and he had mounted his steed along with the rest. His doubts remained. He had his *arrière pensée*, but it was of a particular kind. He felt a heavy load of thought drawing him back. That was his "thought behind," but he did not know whether that was one of the interpretations of the phrase to be found in the dictionary of the French Academy. He rode his steed, but he constantly felt *post equitem sedet atra cura*. Sir Robert Christison then pointed out the technical difficulties presented by the constitution of the Scotch universities. Those bodies, he said, were empowered to make alterations in their ordinances, but could not act in violation of their charter or any Act of Parliament by which they were governed. At the same time, he said, they had great facilities up to a certain point, and they were not unwilling to exercise their powers to that extent. He begged the Council to be tender in its action towards the Scotch universities, and to be content with the steps already taken, though they might not fully accomplish the object which the Council so much desired. There was a great reluctance to enter into any such scheme on the ground of the extreme peril to which the universities would be subjected by parting with a right which they had enjoyed for centuries. Any attempt that might be made to carry a measure of that kind would lead all the educated classes of Scotland to rise in rebellion against it. Their object should be first to carry through a scheme of conjoint examination as far as it was practicable among themselves, then to proceed to improve their system of education and professional examination, and finally to take up the serious question of how best to carry on an inspection of the examinations.

Dr. PYLE said it might be thought presumptuous for so recent a member of the Council as himself to express any opinion on a subject of such importance, but he felt that he should be wanting in his duty to the profession if he did not give his support to the proposal of Sir William Gull. It was felt very strongly in the profession that the conjoint examination scheme ought to be carried into effect. All the English bodies desired to unite in such a scheme, and three out of the five Irish bodies had a similar desire. Under these circumstances they could go with confidence to the Lord President and seek his assistance in the matter.

Dr. ALLEN THOMSON thought that the Council had attempted too much. He did not think that there was a general demand in the profession for so large a scheme as that which had been proposed. By the establishment of a minimum standard he feared that the education at the universities might be lowered, and that they would have some difficulty in extending their examinations and qualifications beyond the established minimum. If a conjoint scheme were to be entered into, it should be limited to an examination upon practical subjects. He wished to express the opinion that he had held from the first, that a conjoint scheme would be beneficial under which the corporations might unite for the granting of a licence to practise, and encouragement would be given to the universities to promote a higher education in connexion with the profession.

Sir W. GULL, in reply, said that some members of the Council appeared to imagine that the object of the resolution was the appointment of a deputation to the Privy Council, but its terms did not bind them to the Privy Council or the Home Office, or any other department. What was intended was that they should find out from those members of the Government with whom they could have intercourse what was the real intention of the Government about carrying out the 19th clause. He did not wish to commit the Council to any negotiations, or indeed to any expression of opinion. Some of the arguments, too, had opposed any application for enabling clauses for the University of London and the Apothecaries' Society, but there was nothing about enabling clauses in the resolution. He simply wished to inquire what was the general feeling of the Government on this matter, and how far aid would be given in carrying out the 19th clause. Some of the Scotch members had forgotten the aphorism of the wisest of men, that fear was a bad counsellor. They were so afraid of Government interference that they imagined some great evil might result to the universities of Scotland if any communication were held with the Government. There appeared to be a constant oscillation among some of the examining bodies between *nolumus* and *non possumus*. One could not do what was desired because there was a legal difficulty in the way; another had a legal difficulty of a different kind; another had a senate and a council and a chancellor, and so were prevented from doing it. It was the old argument of obstructives. They did not wish it; they were content with the existing state of things; but they did not say so, because the outside world would probably be of opinion that they were considering their own interests rather than those of the public, so they sheltered themselves under the *non possumus*. That was his idea of *arrière pensée*. The University of London and the Apothecaries' Company, however, were in earnest, and all he wished was that all the different bodies might not be bound by technicalities, but might be free to do what they considered best—not that they should be forced to do anything, but that they might be at liberty to act as they thought desirable. The Council was asked to superintend the education of medical men in this country; under present conditions they could not do it. The first step was to secure a fixed examination in the three divisions of the kingdom; and to accomplish this, they might, as proposed in the resolution, go to the Government and say, "Here is an important clause which we think has much to do with the advancement of education; are you willing to aid us, or will you throw any obstruction in the way of the Council in carrying out that 19th clause?" There was a great number of medical men educated in England, and he did not see why they should be hindered in their attempts to improve the education by difficulties which existed on the other side of the Channel. By passing the amendment the Council would stultify itself, after all the discussions which had taken place. Dr. Alexander Wood had evidently been in great doubt about his own amendment. He had altered it bit by bit, and then he wanted to change its nature altogether, showing that he dare not directly oppose the motion after the Council had been so long considering the matter.

The amendment was put to the meeting and negatived, 6 voting in favour of it, and 14 against it.

The CHAIRMAN suggested that it would be desirable to have a larger deputation than the "four" proposed in the resolution.

The resolution, with the number left out, was carried by 14 to 4.

The deputation was then appointed, to consist of the President, Dr. Storrar, Dr. Apjohn, Dr. Acland, Dr. Macrobin, Sir Wm. Gull, and Mr. Bradford.

A conversation ensued during which it was suggested that it would be desirable to secure the attendance of Mr. Gladstone, Mr. Bruce, and Mr. Lowe, when the deputation waited upon the Lord President.

The Chairman left the room to write a letter to the Lord President, and during his absence Dr. Stokes presided.

The Council then entered upon the consideration of the report of the Committee on the Visitation of Examinations, deferred from the last meeting of the Council.

The following is the report:—

"The Committee on this subject appointed on the 8th inst. (July 8th, 1871) beg to report—

"1. That in their opinion the time has now come when an interchange of visitors between the three Branch Councils would strengthen confidence in the visitation, and would tend to assimilate the character of the examinations of the various boards.

"2. That with the view of carrying out the resolution of the Council of 8th July, a Committee of Visitors be appointed to make arrangements what examinations should be visited, and for carrying out the visitation.

"3. That the Committee of Visitors consist of eight, four to be elected by the English Branch Council, and two by the Scottish and Irish Branch Councils respectively.

"4. That each examination reported on shall be visited by a due proportion of members of the Branch Councils, other than the one in that division of the kingdom where the examination is conducted.

"5. That it is not desirable that visitations should take place in the case of those examining boards with regard to which it shall appear to the Visitation Committee that there is a reasonable prospect of a conjoint examination being formed. "ALEXANDER WOOD, *Chairman*."

Dr. ALEX. WOOD said the report was dated the 10th of July, 1871; but in consequence of the assurance which had been given at every subsequent meeting of the Council

that a conjoint examination would be established in each division of the kingdom, the consideration of the report had been deferred. He now wished to move the adoption of the report, omitting the last paragraph. That paragraph was introduced at a time when negotiations were pending for securing conjoint examinations, and it was thought undesirable to interfere with the boards which were engaged in those negotiations. Now, however, when the scheme for conjoint examinations was at least in abeyance, he thought that there should not be any exception in the visitations. No one who had watched the proceedings of the Council and the effect of the visitation of examinations could have the slightest doubt that they had exercised a very important influence towards improving the examinations; and it was therefore desirable to resume the visitations, with this alteration, that, instead of the Branch Council of each division of the kingdom visiting the examinations conducted in that division, there should be an interchange between the different divisions. The friendly suggestions that would be given at such visitations must tend to the improvement of the examinations; and there would be an entire absence of all possibility of favour being shown to particular boards. In 1871 the Committee were unanimous in recommending the report, and it appeared to him that the course suggested was almost the only one that could be followed.

Dr. STORRAR seconded the motion. Since the system of visitation of examinations had been in operation, he said, a great improvement had taken place in the whole demeanour and character of the students in the London schools. Years ago, before the introduction of a preliminary arts examination, he had expressed an opinion that many men entered the profession because it was the only one open to incompetents. At the time it was thought that he had overstated the case, but the knowledge he had recently acquired assured him that he had not done so. One of the professors of University College told him not long ago, that since the new regulations had been in force they had tapped a higher grade of society. Higher attainments were called for, and men of higher attainments had responded, while men of no attainments had been shut out. Another consequence of the visitations and of the recommendations of the Council was, that the examinations had become more practical. "Grinders," too, had to a great extent disappeared. Formerly nearly every student at University College Hospital went through the process of "grinding," but Prof. Ellis had told him that now, out of a class of between 230 and 240 students, less than half a dozen were being "ground," and those were mostly men who had been already rejected over and over again. Past visitations had, with hardly an exception, been conducted in a becoming manner, and the reports presented to the Council had been productive of great good.

Dr. PARKES moved as an amendment, "To substitute for Clause 4 in the Report, the following clause:—'That a committee of five members of Council be appointed to form a plan for the visitation of examinations, and shall be empowered to appoint two or more persons (not members of the Council) to visit the various examinations of the licensing bodies, and to report to the committee; and that, after consultation with the Finance Committee, a proper remuneration shall be assigned to these visitors.'" He said, when the visitation of examinations was proposed by himself in 1865, and seconded by Dr. Paget, the plan embodied in the original resolution was that the visitations should be by members of the profession who were not members of the Council, but an amendment moved by Mr. Syme and seconded by Dr. Andrew Wood was carried, "That the visitation should be made by the Branch Councils in each division of the kingdom." Dr. Alex. Wood now proposed an extension of the scheme by which, however, the visitations were to be made by members of the Branch Council of another part of the kingdom from that in which the visitations were held. That was decidedly an improvement on the previous plan, but still greater efficiency would be attained by the appointment of persons altogether separate from the Council. The different members of Branch Councils had not a great deal of time to spare, and could not, therefore, make the visitation so frequent as they wished, but under the proposed scheme a still greater demand would be made upon them. It would not be possible either to institute any comparison between the examinations in the different parts of the kingdom, whereas if persons outside the Council were appointed to visit all the examinations at different times, they would be able to give an accurate account of relative merits or deficiencies of the different examinations. A very small number of persons would be sufficient—perhaps two or three—to supervise all the examinations, and no difficulty would be experienced in finding gentlemen willing to carry out the scheme. It would of course be desirable to appoint a committee to make all the arrangements, the appointment of visitors, and the payments after consultation with the Finance Committee. Dr. Alex. Wood had called his attention to the fact that in 1861 he (Dr. Wood) proposed that the visitations should be either personally or by deputy. It was to be regretted that the proposal was not agreed to.

Dr. ANDREW WOOD seconded the amendment. The visitations that had already been made had been *bonâ fide* and effective; but in order to place them above suspicion it was the general feeling of the profession that visitors should be appointed who were not members of the Council. In 1861 there were no funds to carry out such a scheme, but now their funds were ample. It was not necessary that the inspection should be annual, for after a lapse of three or four years it would be easier to judge of the progress made and the changes effected.

Sir R. CHRISTISON thought it would be preferable to combine both schemes, so that members of the Council might be accompanied by gentlemen who were not on the Council. A visitor who was not a member of the Council would be likely to carry his criticisms too far, but all deficiencies ought to be tenderly dealt with. If three gentlemen were appointed, one for each division of the kingdom, to visit the examinations, accompanied by members of the Council, no doubt efficient reports would be secured.

Dr. ALEXANDER WOOD, after referring to the report of a committee, of which he was chairman, which was appointed in the first year of the meetings of the Council, said, although he felt bound to vote for the report, yet he should regard the defeat of his own motion with considerable pleasure if the Council were prepared to adopt the proposal which he brought forward so long ago.

Dr. STORRAR expressed his approval of Dr. Christison's suggestion.

Dr. AQUILLA SMITH considered that the visitations hitherto had been signally beneficial. He approved of an interchange between the different divisions, but he hoped the Council would not consent to entrust to others a duty which especially belonged to themselves. A trial should be given to the recommendations of the report before any further steps were taken.

Sir WM. GULL said the object which the Council had in view was to see that the examinations were sufficient and carried out in good faith; and there were many young graduates of high honour who could be trusted to afford the Council all the information they required as to the nature of the examinations and their results. Younger men were more up to examinations than those who had been long in practice. One who had just taken his degrees was the best man to send.

Dr. BENNETT thought they had no power to delegate this duty to those who were not members of the Council. No such thorough investigation of the examinations was required as was assumed when it was proposed to send young men to report on them. All that was needed was an assurance that the examinations were sufficient to test the competency of the men who entered upon the practice of the profession.

Mr. QUAIN said if the examinations to be visited were examinations for honours, then the young men whom Sir W. Gull alluded to would be very fit persons for the duty, but all the Council wanted to know was whether those who were passed were fitted for the common run of practice. Young men were the very worst persons who could be chosen for such an office. They should rather select some one who had had a good deal of experience. Another matter to be considered was the opinions of the examiners. Were they to be judged by young men who had but just obtained their degrees? Experienced men were required, but how could such men be obtained who were willing to go to any part of the kingdom to visit examinations in medicine, surgery, and midwifery? Only those who had never attained any position in the profession would be willing to go. Men of science might be obtained; only practical men were suited to the work. If such men were appointed as

Sir W. Gull had suggested, the examiners would be tempted to raise their examinations too high, and so afford some justification to the Government for interfering; but all the Council wanted to secure was moderately good examinations, which sufficiently tested the fitness of the men for their work.

Dr. STOKES bore his testimony to the improvement that had been manifested in the mental and moral condition of medical students for some years past; but whether or not it was entirely owing to the visitation of examinations was a separate question. Students at the present day were so remarkable for their application to their studies and improvement in everything that indicated elevation of character, that they seemed to be derived from a different class from the students of ten or twenty years ago. Grinding, too, had greatly diminished.

Dr. FLEMING was inclined to vote for the amendment, as it was of great importance that the supervision of examinations should be above suspicion. The inspectors ought to be experienced persons. Young men were by no means the most competent to do the delicate inquisitorial work required, and probably they would not be very well received by the examiners. If the motion were adopted two or three members of each Branch Council would have to go about to the various parts of the kingdom, and the expense of that would be perfectly ruinous.

Dr. SHARPEY thought several of Dr. Quain's objections would be met by the adoption of Sir R. Christison's proposal to unite a member of the Council with a gentleman who was not a member of the Council. The funds of the Council were in a flourishing condition, and if they obtained from the Government accommodation for holding their meetings, they would even still better be able to afford the expense of sending out paid visitors.

Dr. ALLEN THOMSON also approved of Dr. Christison's suggestion. It was important that the Council should retain a hold over the work, but it would be a very difficult matter for the members of the Council to perform it entirely by themselves.

The amendment was put to the meeting and carried, 12 voting in support of it and 8 against it.

On its becoming a substantive motion,

Dr. ANDREW WOOD moved as an amendment:—"That Dr. Parkes's motion be adopted, with the omission of the following words: 'To substitute for Clause 4 in the Report the following clause.'"

This was seconded by Mr. HARGRAVE, and carried.

On this amendment being put as a substantive motion,

Sir R. CHRISTISON moved as an amendment, "That an inspector of examinations (not a member of Council) be appointed for each division of the kingdom by the Branch Council of each division, to report to the Council at its next session; and that at each visitation of examinations he be accompanied by a member of Council." This proposal, he said, was to put the inspection of each division into the hands of one man, for the less the number of inspectors the less would the responsibility be divided, and the more effectually in all probability would the work be performed. It was desirable that he should be accompanied by a member of the Council to prevent his examinations from becoming too searching. All men when they first began their examinations pitched their expectations too high. One great objection to the appointment of young men was that probably they would not be independent when visiting the colleges of which they themselves were graduates, but would be influenced to some extent by a desire not to lose the recommendations of the professors. It was therefore desirable to have a middle-aged man who had had some experience in practice.

Mr. HARGRAVE seconded the amendment.

Sir D. CORRIGAN said he should support the amendment. He approved of the appointments resting with the Branch Councils for their own divisions, for no Branch Council would be thoroughly competent to appoint for any other division.

Dr. PARKES thought the amendment would almost entirely destroy all hope of carrying out an efficient system of visitation, while the plan which he himself had proposed would accomplish all that the Council wished for. The visitors would report to the committee, and the committee would have an opportunity of considering those reports, and of sending them back to the visitors for further details, if necessary, before finally presenting the whole matter to the Council. No one, however, could tell what kind of report might be furnished by a person appointed by a Branch Council. Would it be satisfactory to the profession to have the Branch Councils appointing persons to visit the examinations of bodies which sent representatives to the Branch Councils? He could not think that such a system would be at all satisfactory. He also disapproved of the limitation to one inspector for each division. It appeared to him that it would be much better to have two visitors who could talk over what they had seen, correct one another's erroneous impressions, and so arrive at a safe conclusion before sending in their report. One person could hardly be considered competent to judge of all the examinations, but two or three of different acquirements and different experience would be able to make a proper investigation of all parts of the examination they were visiting. He did not think any advantage would be gained by a member of the Council accompanying the inspectors. It would be much better that they should not be under the influence of the Council, or biased by the opinion of any member of the Council.

Dr. ALEXANDER WOOD said there were two questions involved in this matter, the question of principle and the question of detail. The Council had already shown that they were anxious that henceforth the duty of visiting examinations should not be exclusively confined to members, but that it should be by visitors specially appointed. Many difficulties, however, would arise if the visitations were left entirely to such men. The whole tendency of the efforts of the Council had been to give a practical turn to the examinations, and therefore he should deprecate the appointment of anyone who had not had real practical experience of the profession. If, too, members of the Council were to be debarred from visiting the examinations, the Council would be deprived of a great source of valuable information which would otherwise be available in their discussions. It was desirable that the question should be referred to a committee to prepare a scheme, and if he had the opportunity he should move an amendment to that effect.

Dr. ANDREW WOOD was opposed to Sir R. Christison's proposal. It was a bad plan in a general system of inspection to keep the three divisions of the kingdom separate, and still worse that what would otherwise be an independent visitor should be accompanied by a member of the Council in order that his criticisms might be moderated.

Dr. AQUILLA SMITH supported the amendment because it would retain within the Council a certain amount of control over the examinations, and afford a direct means of learning from time to time what took place at the different examinations. Perhaps Dr. Wood's objections might be met by leaving the appointment of the inspectors to the Branch Councils, and then they might be sent to a different division of the kingdom from that by which they were appointed.

Dr. QUAIN said he was in favour of combining independent visitors with members of the Council. If the principle were affirmed, then the details might be left to a committee.

The amendment was negatived by 12 votes against 7.

Dr. ALEX. WOOD moved as an amendment, "That this Council is of opinion that the visitation of the examinations, as conducted by the Medical Council, has proved very beneficial. That the Council is, however, also of opinion that the time has come when the alternative afforded by the Medical Act should be adopted, and that the aid of competent persons, not members of the Council, should be obtained to aid in performing the duty. That a committee be appointed to prepare a scheme to carry out such a plan, including the due payment of the visitors, and to report during the present session to the Council."

Dr. QUAIN seconded the amendment, which, on being put to the vote, was carried, 16 voting in its favour and 4 opposing it. On being put as a substantive motion, it was agreed to, and the following gentlemen were selected to form the committee:—Dr. Alex. Wood (chairman), Dr. Storrar, Dr. Smith, Dr. Sharpey, Dr. Parkes, Dr. Quain, Sir R. Christison.

Dr. ALEX. WOOD, alluding to the case of Mr. Permewan, expressed, on behalf of the Secretary of the College of Physicians, Edinburgh, his extreme regret that he had not referred to the list of names of those struck off the Register

when Mr. Permewan applied for examination. Previous to examination Mr. Permewan stated that he was a Member of the Royal College of Surgeons of England, and he also showed his diploma from the Apothecaries' Society. Immediately the true facts of the case became known in Edinburgh the law agent was instructed to write to Mr. Permewan that he had obtained his diploma under false pretences, and must immediately return it. He wrote back in reply, that his position was one of peculiar hardship, that the offence for which he was convicted was committed with extenuating circumstances, and that very distinguished members of the profession had taken a deep interest in him, and were prepared to have him, if possible, restored to the Medical Register. The answer sent to him was that unless his diploma were returned, legal proceedings would be adopted. He then sent back his diploma, and in the list of the College published since then his name did not appear. The surrender of the diploma had, however, only been conditional. The secretary had written to him for an unconditional resignation, but that had been refused. If a resolution were passed that the Council were of opinion that no circumstances had come to their knowledge warranting his restitution to the Register, then the Council would take the necessary steps to strike Mr. Permewan's name off the list.

Dr. ANDREW WOOD said he had made no application to be restored to the Register. What the Council had before them was a memorial from certain practitioners at Redruth in Cornwall, and it was now only necessary to reply to that memorial.

After a short discussion, it was agreed, on the motion of Dr. ANDREW WOOD, seconded by Dr. FLEMING:—"That a letter be addressed by the Registrar to certain practitioners at Redruth, Cornwall, who have memorialised the Council in regard to the case of John Permewan, stating that having already exercised their power under the Medical Act, in striking his name off the Register, the Council have represented the matter to the Royal College of Physicians, Edinburgh."

Dr. ANDREW WOOD then moved: "That the standing orders be suspended, and that the Council meet to-morrow at 10 o'clock. This was seconded by Dr. PYLE, and agreed to.

SATURDAY, MARCH 29TH.

The Council took into consideration the Conjoint Examination Scheme for Ireland, and Dr. APJOHN moved that the sanction of the Council be given to it. Mr. HARGRAVE seconded the motion, and Dr. STOKES supported it. A long discussion followed, in which various objections to the scheme were urged, relating chiefly to the examinations in general education. Several amendments were proposed with a view of meeting the objections, but they were negatived by the Council.

MONDAY, MARCH 31ST.

The Council was engaged for some time in considering the case of Dr. Bass Smith, who was charged with "infamous conduct in a professional respect." The offence alleged, and not denied by the respondent, was that of seducing the niece of Mr. Edmonds, of Newent, Gloucestershire, while he was in professional attendance on the family. Mr. RICKETTS, who appeared in defence of Dr. Smith, contended that the charge was one of mere personal immorality, and not of conduct such as was contemplated by the Medical Act. He created some surprise at the Council by declaring that if such offences were to be made the ground of applications for removal from the Register, few medical men would prove "scathless." The Council, after a private deliberation, ordered Dr. Smith's name to be removed from the Register.

The discussion on the Irish Conjoint Scheme was resumed, and the Council, by an almost unanimous vote, agreed to an amendment sanctioning the scheme, with the exception of part of the clause respecting the preliminary examination.

The report of the Pharmacopœia Committee was presented to the Council, and on the recommendation of the Committee, a new edition was ordered to be printed, with such minor alterations and additions as the Committee might think desirable.

TUESDAY, APRIL 1ST.

Mr. Robert Riddell, of Lauder, Berwick, was summoned before the Council on a charge of "infamous conduct in a professional respect;" the charge being that of having alleged in various letters that he had committed adultery with the wife of Mr. Broomfield, of the same town, while in professional attendance on the family. The Council, after hearing the details of the case, declined to order the removal of the respondent's name from the Register.

An application from Dr. F. Morris, of Swindon, who was convicted (wrongfully, as he alleged) of an indecent assault in 1871, to have his name restored to the Register, from which it had been removed on proof of conviction, was acceded to by the Council.

These judicial proceedings occupied the entire sitting of the Council.

WEDNESDAY, APRIL 2ND.

The PRESIDENT stated that information had been received by the Council that a special communication had been made by the Chancellor of the Exchequer to Mr. Ayrton on the subject of housing the Council in a building hitherto occupied by the Savings Bank at the corner of St. Martin's-lane.

The Council then took into consideration the report of the Committee on the Medical Qualification of Women, and after discussion empowered the Committee to enter into communication with any public institution in which there is provision for the education and examination of women as (1) midwives, (2) dispensers, and (3) superintendents of nurses and of medical institutions; and also to consider and report in what manner a register of all persons obtaining qualifications from such bodies might be kept on conditions similar in principle to those for registering medical and surgical diplomas.

A report from the Committee on the professional part of Medical Education was then read, and the discussion thereupon was adjourned at the rising of the Council.

THURSDAY, APRIL 3RD.

The report of the committee on the professional part of the examination was further discussed, and ultimately the consideration of the subject was deferred till the next session of the Council.

On the motion of Dr. STOKES, a resolution was passed declaring it to be expedient that the Council should have power to register a qualification in State Medicine after such qualification had been granted according to regulations approved by the Council.

A discussion then took place on the report of the committee on the visitation of examinations, which recommended a visitation during the coming year by members of the Council, along with special visitors, the arrangements being made by the Executive Committee. An amendment was proposed to the effect that the visitation should be by independent inspectors alone. This amendment was lost. The discussion on the original motion was not closed when the Council adjourned.

DEPUTATION FROM THE MEDICAL COUNCIL TO THE GOVERNMENT.

DURING the sitting of the Council on Thursday the President, accompanied by several members, left, in order to wait upon Lord Ripon according to appointment. After an absence of more than one hour and a half they returned, and the President stated that in the course of the interview (at which Lord Granville and Mr. Bruce were also present) Lord Ripon stated that he was not much disposed to introduce so small a measure as the enabling Bill sought by the London University and the Apothecaries' Society, but that he was disposed to be *favourable to such a bill if introduced by a private member*. This, he said, was the chief result of the interview, which, on the whole, was not unsatisfactory. It was further stated that the Government desire to hold themselves at liberty to adopt any course that circumstances might seem to require.

INCREASE OF MEDICAL SALARIES.—At a late meeting of the Guardians of the Waterford Union, the salary of Dr. Fitzpatrick, the medical officer of the district, was increased by £25 a year. Last week, also, the salaries of the dispensary medical officers of the County Down were each increased by a similar amount.

THE LANCET.

LONDON: SATURDAY, APRIL 5, 1873.

WE had not originally intended to make any comments on the important paper of Dr. FOX, or on the debate which it has excited at the Pathological Society, until the pleadings were completed. But on reconsidering the situation, more especially in the light of last Tuesday's debate, we are constrained to offer some brief account of what has been so far said, and some suggestions on points which appear to us very important. Tuesday, the 15th inst., is to see the end of this discussion, for the President announced that on that occasion he should prolong the meeting till every intending speaker had been heard; and we are anxious that nothing useful should be omitted from the considerations laid before the profession.

It is a grave responsibility that Dr. WILSON FOX has undertaken. A substantial alteration of phraseology in regard to such matters as phthisis and tubercle ought no more to be undertaken with a *leger cœur* than the Franco-German war should have been. But we do not doubt that Dr. FOX is well aware of this; and certainly, if any man has the right to attempt such a modification, it is he. Both by clinical experience, and even more remarkably by the number and beauty of the microscopical preparations and drawings which he has made with his own hands, Dr. WILSON FOX stands pre-eminent among English, indeed among European, investigators of all that belongs to tubercle and phthisis. But we doubt very seriously whether Dr. FOX, or some others of those who are now rushing into the fray, have maturely weighed all the consequences of their words. *Consequences of words*, we say. May we not entreat the combatants to cast a backward glance on the successive phases of medical history, and observe the disastrous results that have a thousand times followed the reckless adoption of a descriptive term because it happened to sound neat and concise?

Dr. FOX's views have been so extensively ventilated within the last few weeks that our readers will scarcely require a detailed account of them. Briefly be it said that he proposes to reintroduce that older use of the word "tubercle" which applied it to the essential pathological elements of *every phthisical disease of the lung*, no matter what the special history of the individual disease might be. He proposes this on the serious and plausible ground that, as regards essentials, it is impossible to maintain that pathological distinction between, e. g., catarrhal pneumonic phthisis and acute miliary phthisis of which NIEMEYER may be quoted as the especial advocate. Basing himself more particularly on the varieties of phthisis observed in children, Dr. FOX declares that in one and all of these affections there is the same underlying pathological event—namely, the formation of an "adenoid" tissue and its more or less rapid overgrowth in the alveolar walls; and that all the confused mass of heterogeneous products which we may detect in the more complicated cases are but accidents, inflammatory, infective, or degenerative, accompanying the true adenoid or tuberculotic process.

In considering this proposition of Dr. FOX's, and the discussion so far elicited, it will be our desire to speak as a judge summing up, rather than as a counsel pleading. We must first record (what we believe to be) the unanimous belief of competent pathological microscopists, that in all his statements and depictions of pathological fact Dr. FOX is faultlessly accurate. It may be taken, then, as certain, that adenoid overgrowth *does* occur in every form of pulmonary disease which any intelligent person would call "phthisis." It is of course quite another question, what is the real significance of this fact? And here it will be best to part company with Dr. FOX for the moment, and hear what his commentators have to say; observing, however, that of the more distinguished pathological authorities one (Dr. BURDON-SANDERSON) is absent from London, and cannot return in time for the debate at all, and that at least three others—Dr. ANDREW CLARK, Dr. T. H. GREEN, and Mr. ARNOTT—have not as yet spoken.

The speakers were Dr. MOXON, Dr. CAYLEY, Dr. LIONEL BEALE, Dr. PAYNE, and Dr. DOUGLAS POWELL; and it certainly cannot be said that there was any excessive monotony of opinion among these five speakers. But there was, nevertheless, a substantial agreement as to one or two points which are of great importance. In the first place, Dr. FOX does not seem to find any supporters, so far, in the idea that the so-called adenoid (or lymph-gland-like) tissue possesses any special causative connexion with pulmonary phthisis; rather, it seemed to be the general impression that the overgrowth of adenoid tissue is an inevitable result of common irritation on many kinds of tissue, and especially on the lung-tissue. The second main question which engaged the attention of the speakers was, whether the arbitrary limitation of the word tubercle to the so-called grey or miliary granulation which has been more or less prevalent since the date of VIRCHOW could be maintained. The drift of opinion, as to mere microscopic fact, seemed to be, that there is no pathological unity in the structures designated as "miliary tubercle," "knötchen," &c.; and that, on the other hand, the very appearances which have usually been deemed most characteristic of this structure are not to be distinguished from many similar appearances (round cells in a reticulum) which are to be met with in syphilitic gumma and in several other morbid structures. Was it, then, worth while to maintain the position of grey granulation as a specific entity, *called tubercle*, merely on account of its frequent association with pulmonary phthisis? Upon this point there seemed, on the whole, to be a good deal of hesitation. Dr. BASTIAN, however, pronounced himself decidedly; while taking a precisely opposite position to Dr. FOX, and denying that there was any evidence of a specific something—adenoid or otherwise—underlying the varied morbid products in the different forms of phthisis, he distinctly recommended the abolition of the word tubercle even as applied to the miliary granulation. On the other hand, Dr. DOUGLAS POWELL considered the retention of the term tubercle, in the latter limited sense, to

be desirable; and expressed the opinion that there was really a numerous class of cases of acute tuberculosis attended with but few physical signs during life, and after death the lung deposits were found to consist essentially and mainly of miliary stuff, although there might also be a certain amount of epithelial proliferation, such as tends to occur in all active or passive congestions of the organ.

A third important question which was more or less present to the minds of most or all of the speakers, but was hardly grappled with any distinctness except by Dr. BASTIAN, was the following: How far is the general disease, acute tuberculosis, as occurring spontaneously in man, and resulting, so far as the lung is concerned, chiefly in numerous minute deposits, without much tissue-destruction, to be considered identical with the phenomena observed by FOX and SANDERSON as the result of the most varied irritations? It is clear enough that the experimental disease is not anything specific, as VILLEMIN erroneously supposed; but is there sufficient identity between the phenomena produced and those of spontaneous tuberculosis to warrant any inference that the latter are non-specific? We confess that we do not think so; but it is necessary to guard ourselves against misinterpretation. It is quite certain—and various speakers illustrated the fact—that nearly any irritation acting within the lung can produce, at greater or less distance, a local crop of miliary tubercles attended with more or less of miscellaneous inflammatory products resembling in all essential points the changes which in experiments on animals have been produced indifferently by infection with putrid matter, with tuberculous stuff, and also by the more continuous irritation occasioned by a seton inserted in the skin. It is to be observed, however, as Dr. FOX himself has pointed out, and as Dr. GREEN has forcibly shown in his recent papers in a contemporary, that miliary tubercles, the result of simple local irritation, are by no means usually destined to a dangerous kind of transformation, but, on the contrary, tend mostly to the harmless fibroid change which results in the so-called encysted tubercle. We see no reason to believe that it makes any difference whether such a local miliary tuberculosis be septic or simply irritative in its origin; whether it results from such a simple cause as irritation of the mucous membrane of a bronchus, or from the diffusion, to a certain distance, of septic material taken up from a patch of softening lung. It seems to us that there is a broad distinction between such a phenomenon and the occurrence of widespread miliary deposits, as a part of tuberculosis affecting the organs generally. It matters not in the latter case whether the deposits consist simply of round cells in a reticulum, or of these combined with more or less varied inflammatory products; the point is, that the deposits are numerous, discrete, and unattended by any considerable tissue destruction. Such cases have a clinical history of their own, a history which, familiar though it may be to a certain number of experts, is unquestionably very often overlooked in practice. We venture to say that the following clinical history is common enough in practice, and as commonly misunderstood with disastrous results:—A young person, often quite a young child, but more commonly between the ages of fifteen and thirty, emaciates, becomes dyspeptic, and has a daily access of febrile heat; there may be a little cough, but there is no expectoration; the lungs yield no well-marked physical signs of disease. The strength progressively diminishes, the hectic becomes more marked, yet still there are no signs which obviously point to lung disease; and it is unfortunately true that such patients often go on in a false security till very near the end of their lives. We maintain that such cases have a most marked individuality; that their family history nearly always includes instances of a similar kind, or of acute tuberculosis of the brain and other organs; that the thermometrical ranges are characteristic from an early stage; and that, in short, the disease ought to be fully as easily recognised, by a competent observer, as the commoner varieties of phthisis. Under these circumstances we would earnestly suggest the advisability of retaining the term tuberculosis for the general state, and of tubercle for the local change in this variety of disease. Without discussing the merits of Dr. Fox's propositions, we submit, with all deference, that their tendency, as regards its influence on the general professional mind, is retrograde rather than reformatory. To confound again, under one common denomination, the affections we have just been noticing with the commoner varieties of phthisis, tends, in our belief, very seriously to relax that strictness of diagnosis which, under the influence of comparatively recent pathological views, was becoming more visibly necessary, even to the least instructed practitioners. We dread to return to that chaos which Dr. BASTIAN ably described as reigning within the forty years immediately succeeding the publication of the doctrines of LAENNEC. There are many other points in Dr. FOX's paper, and in the debate of last Tuesday, which remain to be noticed; but we must reserve their discussion until next week.

THE week's work of the General Medical Council will be judged by the profession chiefly in the light of the progress made in the matter of completing Schemes for Conjoint Boards. The Scotch members of the Medical Council have not quite succeeded in the bold undertaking to which they set themselves at an early part of the late meeting. Probably no members but themselves would have had the courage to do what they did, and even they would scarcely have been so courageous but for the help of Sir ROBERT CHRISTISON, whose age entitles him to be an opponent of change, and whose authority is deservedly very great. They actually tried to shelve the whole subject of Conjoint Boards. It has long been known that the Scotch bodies preferred the existing state of things to anything that seemed to be promised to them by a conjunction of licensing bodies. Though, in 1870, under the urgency of Government pressure, they yielded to the principle of conjunction, they did it reluctantly, and have, since the failure of the Government Bill, never been able to agree among themselves in recommending a Conjoint Scheme which had any chance of being accepted by the Council. It was accordingly grand news for them when last week one member of the Council and another contributed any news as to the legal obstacles in the way of various bodies falling in with a Conjoint Scheme, or as to new difficulties felt by the Government in regard to undertaking a measure to remove these obstacles. Dr.

STORRAR'S revelations of the new discoveries by the Government of the advantages of competition among the separate bodies, and the possible risks of conjunction, especially the risk that the united bodies might, unless under "proper authority," raise their requirements and their fees so high as to make the supply of general practitioners inadequate to the wants of the public, were like a draught of new milk to Dr. ALEXANDER WOOD. They supplied an excuse for an amendment on the motion of Sir WILLIAM GULL, that the Council, by a deputation, should wait on the Government, to ascertain how far it was willing to aid the Council in the removal of any legal difficulties in carrying out Conjoint Schemes. The amendment was as follows:—

"That the Council find that several unexpected difficulties stand in the way of forming Conjoint Examining Boards in the three divisions of the kingdom. That it appears that no such combination can be legally formed without an enabling Act of Parliament, which the Government are unwilling to introduce, except on conditions which will imperil the independence of the profession. That under these circumstances the Council is of opinion that it would be inexpedient at present to press Conjoint Schemes."

To the credit of the Council the amendment had only six supporters, and Sir WILLIAM GULL's motion, to ascertain by a direct application to Government how far its assistance could be relied on to enable the bodies to unite which are willing to do so, was carried. It would indeed have been discreditable and stultifying to the Council in the last degree to have "hung up" the subject of Conjoint Boards in the way suggested by Dr. ALEXANDER WOOD's motion. The Council has condemned the system of nineteen competing bodies. The Government has done so. The public even knows of the scandal and expects it to be removed. Under these circumstances the Council was bound to take steps to satisfy itself if the Government was disposed to give the slight assistance of an enabling Bill.

But though the Scotch bodies did not get their own way, they have good reason to be satisfied with the progress of the Conjoint Boards Scheme in the Council. They have a deep determination to have no such Scheme in their own division of the kingdom. But they have been hearty in their assistance to concoct and adopt schemes which shall bind the principal bodies in England and Ireland. If asked what work has been done during the recent sitting, they would triumphantly answer, "We have adopted the Irish Scheme. Isn't that work enough for one session?" But no power on earth short of an Act of Parliament will induce them, corporations and universities together, to form a Conjoint Scheme for Scotland. By assisting to form conjoint and complicated boards for England and Ireland, the mere licence of which is to cost £30, and by refusing to form any corresponding scheme for Scotland, they have helped to achieve an arrangement which, however undesignedly on the part of our northern friends, must have the effect of driving the entrants of the profession away from England and away from Ireland to Scotland, where they may get a double diploma from a Conjoint Board it is true, but a Board without that university element in it which is understood to be a guarantee of stringency, and whose diploma has the additional attraction of costing only half of that which is to be charged under the English and Irish schemes. There is some simplicity in thinking that such partial schemes and such unequal arrangements can have any permanence or success. In the meantime they may do an incalculable amount of harm to such corporations as the English and Irish Colleges of Surgeons, as well as to the profession.

Other subjects discussed by the Council are alluded to by us in other parts of our impression. We have only space now to notice two other questions of considerable moment. The profession will remember that THE LANCET Bill proposed not only a smaller and more independent Council, but that the Council should have the duty of appointing Examiners, and of further appointing independent Inspectors of Examinations. The Medical Council has adopted the idea of independent Inspectors of Examinations. But, as is too common, it threatens to only half do the right thing—it has adopted the idea of inspectors not members of the Council, but has ruled that they shall only act in company with members of the Council. This we consider will limit their independence and freedom of the inspectors, and by so much the value of their reports.

The question of educating and qualifying women to act as midwives, dispensers, and nurses, gave rise to a discussion which, though very good, was far too long. The Report of the Committee on the Medical Qualifications of Women, and the Appendix to it, contain interesting information, but we must take another opportunity of criticising the debate to which it led.

Two years ago Dr. EDWARD BALLARD, then the medical officer of health for Islington, communicated to the Association of Medical Officers of Health the account of a localised outbreak of enteric fever in his district, apparently caused by the use of milk which had in some way or other become contaminated with the special poison of the disease. The evidence was of the strongest, except as to the mode in which the probable pollution of the milk had happened; and since that time the possibility of the diffusion of enteric fever in this manner has been present to the minds of medical men. Only recently, however, has further evidence been forthcoming bearing upon this important subject; and it is to Dr. BALLARD that we are again indebted for such clearer light as we now have upon it. An official report by Dr. BALLARD, who has become one of the medical inspectors of the Local Government Board, has just been made public, relating to an outbreak of enteric fever at Armley, a village in the borough of Leeds, and this report puts beyond all reasonable doubt that this disease is occasionally propagated through the medium of milk. Other instances of such propagation have also lately been observed in East Molesey, near Birmingham, in Leeds, and in a suburb of Glasgow; but the Armley outbreak, from the completeness with which it has been recorded, must be regarded as that by means of which the mode of diffusion under consideration has been most clearly established.

The facts of the Armley outbreak, briefly stated, are as follows: Armley is one of those parts of the borough of Leeds which is scarcely ever free from enteric fever. Up to the end of April, 1872, only two deaths from this disease had, however, occurred in the village, and but two other cases appear to have happened during that month. On the 17th of May two cases of enteric fever came under the observation of Mr. COLEMAN, the district medical officer; and one of these cases was a dairyman, who is believed to have contracted the fever in a neighbouring locality. Four or five weeks now elapsed before another case was observed,

and this case, which Mr. COLEMAN first saw on June 20th, occurred in a house near to the dairyman's dwelling. Five other cases also took place in this house before the end of August. From June 20th ten days passed without the known occurrence of any fresh case, and then came a sudden outburst. During the week which commenced on June 30th and ended on July 6th, cases of enteric fever came under observation in no fewer than 12 houses in Armley; in the next week, ending July 13th, 11 fresh houses were invaded by it; in the next week, ending July 20th, 10 more houses; and in the week ending July 27th, 16 more. In the following week the number of fresh invasions suddenly fell to 2; and from the first week in August until the end of the first week in September, a period of five weeks, there were altogether only 14 fresh houses invaded by fever. The total number of houses invaded during the above-mentioned seventeen weeks was 68. The total number of ascertained cases of fever was 107, of which 11 were fatal. These 107 cases were not scattered equally over all parts of the village, but were located within a limited space, which there was no difficulty in defining upon a map. The invasions of the fever, moreover, were not confined to cottages of the labouring classes. The disease, indeed, did not spare the occupants of some of the least crowded together of the residences in Armley. The vicar had a severe attack, and one or more members of several families sufficiently well off to keep domestic servants also suffered. The special features of the outbreak are thus described by Dr. BALLARD:—

"The epidemic commenced suddenly, and as suddenly abated. Another remarkable feature in it was, that out of the twelve houses invaded in the first week of the epidemic, ending July 6th, there were only two in which a solitary case occurred. In each of the remaining ten houses from two to six cases happened in succession. Again, in the second week of the epidemic, out of eleven houses newly invaded there were but three in which solitary cases of the disease were observed. From the third week of the epidemic onwards, however, the very reverse of this was noticed. Out of ten houses newly invaded in the third week, multiple cases occurred only in two; while in the fourth week solitary cases only occurred in each of the sixteen invaded. All subsequent new invasions of houses were represented by solitary cases of fever, except in two instances. Whatever the explanation of the cause of the epidemic may be, the true cause can only be one which shall suffice to account satisfactorily for the facts just mentioned—namely, the suddenness of the outburst, the suddenness of the arrest of the epidemic, and the fact that multiple cases in a house were almost entirely confined to houses invaded during the first fortnight."

Now Mr. COLEMAN early observed that all the families attacked with the fever at the commencement of the outbreak dealt with the dairyman who suffered from the disease. He was struck with the coincidence; and at the time when Dr. BALLARD, under instructions from the Local Government Board, began his inquiry into the circumstances, he had come to the conclusion that the fever had been spread by the milk proceeding from the infected premises of the dairyman. This opinion was fully confirmed by Dr. BALLARD's inquiry. It is only possible here to state the chief results of this inquiry in the most summary fashion. It was ascertained that every family attacked up to the end of the first week in July dealt with the dairyman who had been sick from fever in May; so did every family, with the exception of one, invaded in the second week of July; so did every family invaded in the third week of July. After this there was less uniformity in the milk-supply of the houses invaded. Further, "a house-to-house inspection showed that within the district in which the dairyman distributed his milk there were 449 houses, having a population of about 2245. About 15 per cent. of the houses were invaded by the fever; and nearly 48 per cent. of the population were attacked by it." Of the 68 houses invaded, 51, including that of the milk-seller himself, were supplied with milk by the dairyman in question; 13 were supplied by various other milk-sellers whose names were known; 1 had no milk from anybody; and the source of milk-supply to 3 was doubtful or unknown. It was also ascertained that the infected dairyman did not supply anything like 51-68ths of the houses in the infected district; so that the question was set aside which might else have arisen—namely, that the proportion of invaded houses supplied by the suspected dairyman was no greater than all the houses which he supplied with milk. Of the 449 houses within the defined district, 132 were supplied by the dairyman in question, and the remaining number taking milk distributed their custom among eighteen other different milk-sellers. In short, 37·8 per cent. of the families supplied by the suspected dairyman were attacked with enteric fever; while only about 5·3 per cent. of the families supplied by eighteen other milk-sellers, or not taking milk at all, suffered from the fever. Dr. BALLARD describes the conditions under which the cases of fever occurred, which happened late in the outbreak, and were not connected with the consumption of the suspected milk. He further shows how remarkably the fever picked out the customers of the dairyman in various rows and blocks of houses, sparing other families; and how the largest consumers were among the earliest and the smallest among the latest attacks; and from the different facts stated and line of argument indicated he comes to the conclusion that the outbreak was due to the distribution of milk from the particular dairy of the infected dairyman, which milk had in some way become contaminated with the poison of enteric fever. He then proceeds to show how this contamination may have occurred, and proves that a well in the dairyman's yard used for dairy and domestic purposes was liable to be contaminated by the contents of a privy and a dung-hole, into one of which, if not both, the discharges of the dairyman when ill would be thrown; and he further shows that the sudden outburst of fever occurred within a fortnight of the period when the well would most probably have become polluted in the foregoing manner, while the time of its cessation followed the closure of the well at an interval consistent with the theory of the polluted water (added doubtless to the milk) being the efficient agent in the propagation of the fever.

It is impossible to do justice in a summary to this able and elaborate report, or to show fully how the different facts agree with Dr. BALLARD's conclusion. This case is as complete as it is practicable to make it under the great difficulties which surround such inquiries.

The moral of this story is best given in Dr. BALLARD'S words. These are as follows:—

"The Adulteration of Food Act of last session enables local authorities to deal with persons who add water to milk; but if a dairyman's own drinking-water is permitted by local authorities to be a fluid little better than sewage, is it not rather a reflection on those authorities than an aggravation of his commercial fraud that he, only meaning to dilute his milk, ignorantly supplies infection to his customers?"

Medical Annotations.

"Ne quid nimis."

THE IRISH SCHEME.

THE President seemed to indicate that the *magnum opus* of the recent session of the Council was the adoption of the Irish Conjoint Board Scheme, as the *magnum opus* of last year was the adoption of the English scheme. Three bodies only out of five in Ireland are included in this scheme—viz., the Dublin University, the College of Surgeons, and the King and Queen's College of Physicians. The dissenting bodies are, of course, the Queen's University and the Apothecaries' Hall. The chief points agreed to by the three bodies are: an Examination in Arts before beginning professional studies; no student to get credit for medical studies till he have passed a Preliminary Examination, including English, Latin, Arithmetic, Algebra, and Geometry; and no candidate to be admitted to his First Professional Examination till he have passed in Greek and the elements of Physics and Meteorology; Examiners in Arts to be appointed by the co-operating university; examination by a Conjoint Board in all the subjects generally included in a medical curriculum; the examiners, twenty in number, to be chosen by the several co-operating authorities according to a plan of which we need not give the details; the Final Examination of the Conjoint Board to be passed before the Irish bodies mentioned in Schedule A give any of their qualifications; a Committee of Reference to be constituted by two representatives of each co-operating body, which, generally speaking, has power to arrange and superintend all matters relating to examinations, in accordance with regulations approved by the co-operating medical authorities; three professional examinations; professors and teachers in universities may be examiners, but private teachers may not be. Fees thirty guineas, to be divided, after payment of expenses, between the two Colleges in the following proportion: three-eighths to the College of Physicians, five-eighths to the College of Surgeons.

The Council adopted this scheme with the exception of the part of it which specifies the nature of the Preliminary Examination, thinking it enough to require a Preliminary Examination, leaving it to be understood that the examination required is of the kind laid down in previous years by the Council. The Council does not seem to care much about the practicability of the schemes which it sanctions; but no outsider will expect such a scheme to work for three reasons: first, it is impracticably difficult; secondly, it is impracticably dear; and, thirdly, it will have the effect of driving students to the Queen's University or the Apothecaries' Company. Irishmen are not such fools as to give thirty guineas and pass three or four examinations for a mere licence to practise when they can get a degree in Medicine for five pounds, and a degree in Surgery for five pounds more, or a licence in Medicine for the modest sum of half-a-guinea.

THE BRITISH MEDICAL SERVICE IN INDIA.

WHILE members of the Army Medical Service at home are anxiously canvassing the terms of the new Warrant—a document which pressure on our columns has hitherto prevented us from criticising in detail—with a view of discovering whether it answers the expectations raised by Mr. Cardwell's reference to it in his speech on introducing the Army Estimates, we learn that grave discontent exists among the senior assistant-surgeons serving in India. We have on previous occasions called attention to their case. The Royal Warrant of April, 1867, which materially increased their pay, has been systematically disregarded. Assistant-surgeons belonging to the British Medical Service of over fifteen years' service continue to be paid at the rate of a little more than 13*s.* per diem (the rate of pay established in 1864), instead of 17*s.* 6*d.*, to which sum they are entitled under the Warrant of 1867. The new Warrant of 1873 expressly provides by its fourteenth clause that surgeons—the new title for the abolished grade of assistant-surgeons—serving in India may be granted local rank as surgeon-major after twelve years' service. But such officers will derive none of the pecuniary advantages accruing to the rank of surgeon-major whilst serving in India; the local rank will simply place them nominally, but not really, in a similar position to that of the medical officers of H.M.'s Indian army of the same service. After what Mr. Cardwell has said in the House of Commons, the Government cannot avoid promoting medical officers of fifteen years' service; and we should be glad if some member of the House would ask the Secretary for War whether the Indian Government is prepared to carry this assurance into effect in the case of officers serving in India, otherwise they will be subjected, as it seems to us, to a great injustice. If the Indian Government chooses to ignore one Royal Warrant, there is no reason why it should not equally ignore the recognition in the present one, by the absence of any scale of pay for the junior rank above fifteen years—that officers of that service are to be promoted.

MR. PLIMSOLL'S BILL.

IT is somewhat a matter of disappointment to find that Mr. Plimsoll's Bill contains nothing really tending to ameliorate or improve the sanitary condition of our sailors at sea. We have many times enunciated the opinion, or, indeed, stated as a fact, that it is as necessary to look after the vital as the inanimate material of a ship's belongings, inasmuch as no vessel, however well built, fitted and furnished, can be wholly independent of manual labour. We take it, however, as probable, that some evidence as to the present sanitary condition of seamen will be sought for and obtained by the Royal Commission just appointed, for on this point most valuable particulars can be gleaned. And, if evidence of this sort be taken and well considered, we are confident that the Commission will, amongst other recommendations, advise that the 10th section of the Merchant Shipping Act of 1867, at present permissive, be made compulsory. In analysing the clauses of Mr. Plimsoll's Bill it does not appear perfectly clear in Section 17, whether a vessel having a deckload, and having put into port under stress of weather, should or should not be absolutely required to remove such deckload before obtaining a new certificate, and proceeding again to sea. Putting into port under stress of weather is not, or should not be, a whitewashing of offences, although, on the other hand, there must be no choice left between the alternative evils of wreck or prosecution, as it is probable that the owner might prefer the former, even if the master elected the latter course.

It appears also that, inasmuch as the owner is bound

under Section 19 to keep his ship marked with the load-line, and also to avoid general overloading, he should, in common with the master, be also responsible for deck-loading, and the more so because the latter process is manifestly practised as much for the advantage of the owner as of the master; in many cases more so. In fact, there can be little doubt that, as to these sections, the responsibilities of owners and masters should be in all respects equal.

We commend these brief criticisms to the consideration of Mr. Plimsoll, and those interested in the Bill, but must reiterate our belief that no amount of legislation will provide properly and sufficiently for the safety of ships, unless provisions are made to ensure that they are manned with sound and healthy crews.

RESEARCHES ON ASPHYXIA IN THE ARTICULATA.

IN a late number of the *Bulletin de l'Académie Royale de Belgique* (1872, Nos. 9 and 10), M. Plateau gives the results of his experiments on the resistance to asphyxia by immersion offered by the Coleoptera. The insect was covered with a piece of gauze, and plunged under water, care being taken that no air adhered to the gauze. Various terrestrial insects thus submerged soon became motionless and apparently dead, but on placing them on filtering paper they recovered after the lapse of a time proportionate to the length of the previous submersion. The Carabus auratus, after 71½ hours of submersion, recovered at the expiration of 17 hours. The Oryctes nasicornus, Hylobius abietis, and the Agelastica alisi remained under water for more than 90 hours without inconvenience. The curious fact was ascertained that various aquatic Coleoptera and Hemiptera bore prolonged submersion much less easily than the terrestrial Coleoptera. Thus, a Dytiscus marginalis, after 50 hours' immersion, though still capable of movement, was paralysed in its posterior limbs, and died at the expiration of 48 hours. The Hyphydrus ovatus died after 21 hours' submersion. The Agabus bipustulatus after 6 hours and 10 minutes; and the Gyrinus natator after 3 hours. The difference seems to be owing, as M. Plateau suggests, to the immobility maintained by terrestrial insects, and the violent and disorderly movements of aquatic, by which the latter soon exhaust the supply of air contained in their tracheæ. The sexual organs protrude during submersion, enabling their structure, ordinarily difficult to investigate, to be easily examined.

SUICIDE IN ST. PETERSBURG.

THE *St. Petersburg Police Gazette* gives some interesting particulars respecting suicide in that city during the three years 1870-72. In 1870 the number of suicides was 124; in 1871, 150; and in 1872, 167. The attempts to commit suicide in 1870 were 42; in 1871, 56; and in 1872, 58. Of the total number of suicides during the three years (441), the males were 365 and the females 76. Not only do the figures show this great disproportion between male and female suicides, but they further show a large increase in male suicides within this short period. Thus in the several years the numbers were as follows: 1870—males 91, females 33; 1871—males 131, females 19; 1872—males 143, females 24. The largest number of suicides were of ages from twenty to fifty years; the next greatest number from ten to twenty years. There were no cases of suicide among children under ten years of age, or among persons above sixty-eight years. The social position of the suicides is thus stated: peasants 147, soldiers 84, tradesmen 57, public functionaries 44. Merchants and clergymen present the smallest number of suicides. The part which indigence probably played in leading to suicide is indicated by the following data: of the 147 peasants, only 46 had a distinct occupation; and of the 57 tradesmen, 14 only had any determined means of existence. In the other well-to-do classes the principal assigned causes of suicide were stress of intellectual work, moral shock, and physical and moral sufferings. As to the mode of suicide, the peasants, tradesmen, merchants, and women and children chiefly had recourse to hanging, rarely cutting the throat. In other classes, particularly among the military, shooting through the head was the favourite mode. Three bizarre methods are recorded: in one case, a public officer, while drunk, killed himself by butting against a window-sill; in a second case, a peasant, also drunk, killed himself by striking his head with a hammer; in a third case, a peasant, drunk like the preceding cases, having vainly attempted to inflict a fatal wound in his throat with a penknife, killed himself by striking his head with a boot. It is curious that, while in these three cases suicide should have been carried out in a state of drunkenness, this state should not have been specially referred to in the summary of assigned causes. The omission, we fancy, is important.

THE NOTTINGHAM GENERAL HOSPITAL.

AT the annual meeting of the governors of the Nottingham General Hospital, held on the 26th of March, an endeavour, for the time unsuccessful, was made to alter the present mode of electing medical officers, and to entrust the elections to a committee chosen for the purpose, instead of to the whole body of governors. The Rev. Mr. Morse moved a resolution to this effect, on the part of the Weekly Board, as regards the paid officers; and the Hon. and Rev. C. J. Willoughby moved a similar resolution as regards the honorary physicians and surgeons. The former resolution was met and defeated by an amendment in direct opposition to it; the latter was withdrawn, the mover having first announced his intention to bring the matter before a special general meeting. Mr. Willoughby made an excellent speech on the occasion, describing the practice and quoting the experience of great hospitals at Leeds, Manchester, Birmingham, and elsewhere, and showing that a costly canvass and a contested election had no tendency to secure the appointment of the best candidate; but that, on the other hand, they frightened out of the field all who were not prepared to incur a very considerable outlay. In spite of the check at present received, we trust that Mr. Willoughby will persevere in his endeavour, and that he will bring forward his motion again and again until it is carried. All who know Nottingham are aware that the hospital elections there have in past times not only been costly, but that they have been contested upon a number of grounds altogether irrelevant to the question at issue. Political and even polemical considerations have had great weight in determining them; and their results have more than once failed to be such as those best acquainted with the professional merits of the candidates would have desired. We wish Mr. Willoughby all success in removing a flagrant blot upon an otherwise admirable institution.

HOSPITAL SUNDAY.

THE report of the last meeting of the Hospital Sunday Council must be regarded as eminently satisfactory. The Sub-committee was able to state that letters and documents had been sent to the ministers of 2628 places of worship within the metropolitan area, and that replies expressive of adhesion to the movement had been received from a very large number of them, while only nine had positively refused their co-operation. It may reasonably be expected that so very small a minority may yet reconsider their deci-

sion. A question of very grave importance was also alluded to by the Sub-committee, and one which will require somewhat delicate handling on all sides. It is a well-known practice on the part of hospital managers, when a clergyman preaches in aid of their own institution, to give him privileges as a governor commensurate with the amount of the resulting collection. Some of the clergy, who use and value the privileges thus accorded to them, have expressed a fear that, by preaching for a general fund, they would lose the letters of recommendation to any hospital in particular, and that hence their poor would be seriously prejudiced. The Sub-committee announce that negotiations are on foot to secure to the clergy like privileges to those which they now possess, and the Lord Mayor explained that the hospitals would be invited to send tickets to the Central Committee, who would distribute them among the clergy in accordance with their needs. We have more than once expressed the opinion that the whole system of governors' letters is an unmixed evil, with no redeeming feature; but whilst this evil is suffered to continue the plan suggested is plainly necessary. May we not hope that the distribution of tickets by the Central Committee may be a first step towards something like the Paris system, where a committee sits every day in order to send all proper applicants to the hospital best suited to receive them. We look for many reforms from the continued operation of Hospital Sunday, and this would be among the greatest that it would be possible to accomplish.

CASUALTIES AT THE UNIVERSITY BOAT RACE.

A FEW casualties appear to be necessarily attendant on the Boat Race day, but considering the vast concourse of people, many of whom were amateur horsemen or reckless pedestrians, the number last Saturday was not unusually large. Although the subjoined list gives the number of the cases taken on Saturday to the West London Hospital, and attended to by the house-surgeons, Mr. Arthur Sobey and Mr. William Webber—through the kindness of whom we are enabled to give the state of the patients up to the time of going to press,—it does not follow that all the accidents were therefore connected with the race. The first case admitted was a man who was run over by a hansom early in the morning, and sustained a severe injury to the ankle joint, but no fracture could be detected. Then followed two cases of injury to the scalp—one in a child aged twelve, who had been knocked down and trodden on by a horse, and had thereby received a wound five inches long at the back of the head; the second in a woman, who, in a drunken fight, had received a blow on the top of the head with a pewter pot. The wound was about eight inches in length, semicircular in shape, and left the bone freely exposed. On being taken to the hospital the flaps were brought together by wire sutures, and in two or three days had united at the extremities. But the middle part having suppurated, considerable gaping resulted. On the Sunday the patient was very ill, the temperature being 105·5°, but on going to press we learn it has now gone down to 101°. The next case, brought in towards night, was a man who had been "indulging" rather too freely and could not give a very detailed account of the manner in which he had received his injury, but foul play must be suspected, as his watch and money had been taken. A deep wound extended entirely across the lower part of the nose and a considerable way into the lip on the right side. When seen at the hospital, the lower part, of the nose was entirely separated from the upper part remaining attached by a narrow band to the upper lip. The wound was brought together by fine sutures, and has united by the first intention through the whole extent except at the right extremity. The next case is unfortunately more serious, being that of a man who was admitted early on Sunday morning in a state of insensibility, having sustained fracture of the base of the skull from being thrown off a horse. When admitted he was bleeding from the right ear and from the pharynx; but there has been no oozing of cerebral fluid. On Wednesday last the patient became slightly conscious, but we regret to state that the prognosis is regarded as very unfavourable, but faint hopes being entertained of his recovery.

In addition to the above, there were from fifteen to twenty cases of minor surgery, as broken fingers, cuts, and sprains.

THE INNERVATION OF THE LACHRYMAL GLANDS.

IN his experiments on this subject, Dr. Demtschenko (Pflüger's *Archiv*, Sept. 1872) has operated on animals narcotised by means of morphia. The subjects were dogs, cats, and rabbits. The electric stimulus was applied by means of DuBois Reymond's apparatus. The quantity of fluid discharged by the lachrymal glands was estimated by the number of square centimetres of blotting-paper that was moistened. In the dog and cat the lachrymal nerve could be reached from the orbit; but in the rabbit the skull had to be opened. The chief results obtained by Demtschenko were that the temporo-malar nerve exercises no influence on the lachrymal gland. Excitation of the great sympathetic augments the secretion; it augments also the quantity of fluid secreted by the conjunctiva, even when the nerve is irritated after ablation of the gland. The augmented flow of tears which follows irritation of a large number of cranial nerves (as the frontal, infra-orbital, nasal, lingual, glosso-pharyngeal, and pneumogastric) is not interfered with by section of the sympathetic, but is stopped directly by section of the lachrymal. This reflex action is not wholly abolished during the sleep induced by chloroform. The author proceeds to compare the results of irritation of the sympathetic and of the fifth on the quantity and quality of the tears. The great violence requisite to expose the fifth throws a doubt upon the value of these experiments. The tears, however, were clear and limpid when the fifth was irritated, but cloudy when the sympathetic was excited. On the whole he thinks he may conclude from these and other experiments that the great sympathetic presides over the normal humectation of the globe of the eye; and this is supported by pathological facts, since the eyes of patients suffering from paralysis of the fifth retain their proper moisture, though the power of shedding tears is abolished. Disturbances of the circulation caused variations in the lachrymal secretion. After ligature of the carotid artery, irritation of the lachrymal nerve caused a less abundant flow of tears than on the sound side. Ligature of the veins increased the flow of tears. All troubles of the respiration caused increased flow.

BRITON MEDICAL AND GENERAL LIFE ASSOCIATION.

THE nineteenth annual meeting of this prosperous Association was held at the Society's House, on Thursday, the 27th ult. The report showed that during the past year the proposals for new assurances submitted to the directors have been 2518 in number for assuring the sum of £723,099 2s. 5d. Of these, 131 for assuring £44,795 19s. 2d. have been declined; 254 for assuring £91,455 10s. 5d. had not been completed from various other causes; and 2133 for assuring £586,847 12s. 10d. have been carried into effect, and produced the sum of £18,782 5s. 2d. in new annual premiums. The amount paid for medical fees was £2607. Two annuities have been granted, as consideration for which £550 have been received. The total income of the Association amounted to £251,181 8s. The claims during the year have been 489 in number, caused by the death of 433 persons. The amount of the claims (after deducting the sums re-

ceived by way of re-assurance) was £162,734 0s. 10d. which, amount embraced all claims admitted before the close of the year. The excess of the year's income over the outgoings amounted to £31,800 0s. 5d. Of this £3056 16s. 11d. has been written off certain assets as depreciation, leaving the funds at the end of the year at £614,166 2s. 1d. The Directors recommended that the usual dividend of £8 per cent. on the capital of the Association, as increased by bonus, be declared and paid free of Income Tax.

GOOD-SERVICE PENSION.

WE understand that Staff Surgeon Dr. Arthur Wood (half-pay) has been recommended by the head of the Army Medical Department for the vacant good-service pension, and that the selection has been ratified by the approval of his Royal Highness the Commander-in-Chief. Dr. Wood's military career was a long and distinguished one. Out of upwards of thirty years' service on full pay, nearly nineteen years were passed in the Tropics. It was in India, and during the series of campaigns which formed so large and chequered a page in the history of our rule of that country, that Dr. Wood rendered his most important services. As surgeon of the 9th Lancers he served through the Gwalior campaign of 1843, under Sir Hugh Gough, and was immediately afterwards sent in charge of the wounded to England—a duty which he discharged with the satisfactory result that only one man died during the voyage. He immediately returned to India and served through the campaign of the Sutlej, and, in addition to his regimental duties, he temporarily carried on those of her Majesty's Inspector-General of Hospitals. Subsequently Dr. Wood was selected to attend professionally on the late Maharajah Runjeet Singh, at Lahore, for which duty he was officially thanked by Lord Auckland, the Governor-General of that day. Dr. Wood was likewise attached to the personal staff of two commanders-in-chief in India. It is well that the memories of past services should be revived from time to time, and we imagine that few men have a better title to a good-service pension than the officer whom we are now able to congratulate.

A SOMERSETSHIRE INQUEST.

AN inquest has been held at Shepton-Mallet, before Dr. Wybrants, the coroner for the S.E. Division of Somersetshire, concerning the death of an old man who was alleged to have been smothered. The deceased was in a position to give evidence against one Watts, and it was alleged that two other persons arranged to take him away and make him drunk, so that his evidence should not be given. They took him away, and made him drunk; and as they were returning in a cart, one of the conspirators, who was also drunk, is said to have sat upon the old man's head, and to have smothered him. There was an odd conflict of medical testimony at the inquest, one medical witness alleging that the *right* side of the heart, the other that the *left*, was full of dark blood; but the most noteworthy feature of the inquiry was that the inquest was materially impeded by the action of the local magistrates, who had possessed themselves of the person who was supposed to have sat upon the head of the deceased, and not only proceeded to examine into the case in form of law, but also refused to allow him to be placed before the Coroner's Court. At last, however, after successive adjournments, the man was procured, and a verdict of manslaughter was returned against him and another. It seems droll that the great unpaid of Shepton-Mallet should wish to inquire into an alleged offence before the proper tribunal had determined that an offence had been committed. The office of coroner, however, is there in good hands; and Dr. Wybrants may be trusted to see that its rights and privileges are in no way disregarded or curtailed.

BRICKFIELD SERFDOM.

WHAT Mr. Plimsoll is doing for the seaman Mr. George Smith has done for the little serfs of the brickfields, and in acknowledgment of his indefatigable exertions a testimonial accompanied by a largely and influentially signed address was presented to him on the 29th inst. The testimonial was indeed a well-merited one. The slavery in which the children who labour in our brickfields grow up into adolescence is more degrading to the moral nature, and much more so to the physical, than that which it was lately the mission of Sir Bartle Frere to suppress at Zanzibar. This crying evil—so disastrous to the development, mental and bodily, of so large a section of the population—Mr. Smith has succeeded in abating, by getting the Legislature to extend the principle of the Factory Act to all the brickfields of the kingdom. In the course of his reply Mr. Smith urged the consolidation of all the Factories and Workshops Acts, and suggested that the light, clean, and fancy trades should come under a Factory Act, and the heavier trades under a Workshops Act. On the other hand, Lord Shaftesbury made the pertinent remark that the inspectors under the Acts should be men of professional qualification, and not merely persons who could pass a tolerable examination at Westminster Hall. Under the present system of inspection, many most important provisions of the Acts are evaded or made virtually inoperative, and will continue to be so until the State provides an effective answer to the question, *Quis custodiet ipsos custodes?*

THE PHARMACOPŒIA.

THE Medical Council has adopted the report of the Pharmacopœia Committee, recommending a reprint of the present Pharmacopœia, with such corrections as may be necessary, and an appendix containing information as to new medicines and new forms of medicine. It is clearly not desirable to alter the Pharmacopœia very frequently, and we approve of a reprint rather than of a new dition. In considering the corrections which may be necessary, we think it would not be amiss in the committee to reconsider the statement of doses of the more powerful medicines in the present Pharmacopœia, such as solution of strychnia, tincture of nux-vomica, tincture of belladonna, hydrocyanic acid, &c. The first two preparations, certainly in less than the largest doses suggested, do occasionally produce decided physiological effects.

INDUSTRIAL DISEASES IN RUSSIA.

AMONG the numerous indications of the rapidly increasing importance which is being attached to sanitary questions in Russia, not the least interesting is that which refers to the diseases of workmen. The *Voix* states that a commission appointed to examine a project for regulating the relations between workmen and their employers has recently terminated its labours, and that in all probability factories and workshops will be placed under supervision, and the hours of work, and ages at which work may be begun, will in future be subject to regulation. Although Russian industry is far from having obtained its full development, the number of manufactories in Russia is estimated at 90,000, and the number of workpeople employed in them at 1,000,000. It is stated that ordinarily the workpeople during labour are exposed to most pernicious influences, either from the nature of their occupations, from the hygienic conditions under which they pursue them, or from the state of their habitations. They suffer from numerous serious diseases, particularly from the redoubtable *factory-typhus* (typhus dit des fabriques). The sickness-rate among the workpeople is not less than from 60 to 70 per cent., and

the mean duration of life among the working class, it is asserted, is only twenty years. Studied in detail the state of things is still more frightful. A deplorable prevalence of rachitism is observed among the youth of the working classes, the greater majority being more or less affected; and the effects of a factory life upon children employed in manufactories is described as "disastrous," many thousands wasting away before reaching the age of puberty. The *Voix* urges the adoption of prompt and energetic measures for the amelioration of the state of factories and workshops, and the regulation of the hours of labour and the ages at which children shall be employed, and it cites the excellent results obtained in England by such measures.

DR. DRUITT.

ON Tuesday, March 4th, the medical officers of the Madras Presidency entertained Dr. Druitt at a dinner at the Club, Madras. Twenty-four gentlemen, including the guest of the evening, sat down to an admirable dinner. Inspector-General Currie, C.B., of the British Medical Department, took the chair, supported by Inspector-General Balfour, of the Indian Medical Service. After dinner, Dr. Currie called upon Dr. George Smith, Principal of the Medical College, to propose the toast of the evening. Dr. Smith, in an admirable speech, took a succinct view of the profession, its aims, honourable position, and claims on mankind, and pointed out how largely the profession was indebted to those who devoted a large portion of their valuable time to furthering those claims and ensuring their position by the aid of literary efforts; welcomed Dr. Druitt to a climate which during the few winter months rivalled if it did not surpass the famed invalid resorts of the Mediterranean, such as Nice, Mentone, &c., and hoped that in their distinguished *confrère* they had had only the first of a distinguished list of visitors. Dr. Druitt, who expressed himself as, and looked, much affected by the very cordial reception he had received, replied in a short and suitable speech. The guests separated at a late hour after a most successful and enjoyable evening. The committee of management, Drs. Paul, Cornish, and Furnell, deserve praise for the successful result.

MR. GEORGE AUGUSTUS SALA.

REPORTS not quite exact in their tenor have appeared in some of our lay contemporaries as to the health of Mr. G. A. Sala. The illness from which he is suffering is not erysipelas, as has been stated in one quarter; while it is something more than simple erythema, as is mentioned in another. Mr. Sala has for many months been labouring under an erythematous affection of the lower extremities, causing him much pain at times and precluding him from active walking exercise. It was only nine weeks ago, however, that he was prevailed upon to suspend his literary engagements and put himself under medical care. During this period the disease has been all but expelled from the lower limbs; but continues, though diminished in intensity, to affect the thighs. The pain and discomfort are often very severe; and there has been exacerbation of the symptoms from time to time, according to the prevalence of east winds. Insomnia, too, has been unusually persistent, the hypodermic injection of morphia in heavy doses being the only hypnotic that has proved even partially efficacious. But the prognosis is, on the whole, favourable; and considering that from the first there has been little or no constitutional disturbance, that the internal organs are healthy, and that since his removal to St. Leonard's-on-Sea the insomnia is lessening, we may indulge the hope that at no distant date the malady will have disappeared, and that society will regain one of its favourite members, and literature one of its most able and accomplished votaries.

A FACT FOR THE OPPONENTS OF THE CONTAGIOUS DISEASES ACTS.

DOUBTS have been occasionally thrown on the correctness of the statements put forward from time to time as to the moral effect of the operation of these Acts by those who are too strongly prejudiced against them to believe that any good can come from such a quarter. It is, therefore, satisfactory to have the assurance of the Attorney-General on this subject. In his speech on the Seduction Laws Amendment Bill the Attorney-General remarked:—"The hon. member for Sheffield had fallen into an unintentional error in speaking of the age at which girls were constantly consigned to prostitution in our great towns. He had greatly exaggerated the extent to which girls of tender age were engaged in prostitution in our streets. In all the towns where the Contagious Diseases Acts had been in operation, the traffic in girls of that age was absolutely at an end. He felt it was very important that this statement should be made."

THE PICKERING MURDER.

THE result of the judicial investigation of this crime has been most unsatisfactory, and the public has been left in precisely the same state of ignorance that it was in before the trial. The entire case is still a deep mystery, and in all probability will remain so. There is one point in the case which we think requires comment. The counsel on both sides admitted, without question, that the separation of the hands and feet from the rest of the body of the deceased was the result of decomposition pure and simple. In all the published accounts of the trial we have been unable to discover that any scientific evidence either for or against this theory was offered. We are well aware that the circumstances were such as to favour decomposition, but we have been unable to find any parallel case recorded. Surely the fibrous structures around the ankle- and wrist-joints would resist decomposition as long as, if not longer than, any tissues of the body, and we should not have expected that spontaneous disarticulation would have occurred in any recognisable corpse. We should like to have more exact information on this point. Through what joints had separation taken place, and what was the condition of the strong tendinous structures running from the limbs to the hands and feet? It is certainly remarkable that a body should be in such an advanced state of putrefaction that the hands and feet should separate from it, and at the same time that a hair should have remained in the grasp of the hand.

A RAILWAY CASE.

A DIFFICULT railway case, developing a difference of opinion among medical men, was tried at the Carnarvon Assizes. On the one side, it was alleged that the plaintiff, a widow with five children, making 30s. a week or more before the accident, was paralysed on the right side, and would never recover from it; on the part of the company, "equally eminent men" maintained that the paralysis was hysterical, and would disappear as soon as the anxiety connected with the trial was over. There had been no hysteria previous to the accident. The jury was puzzled by the discrepancy of medical opinion. After two attempts to agree, the parties concerned agreed to a verdict for the plaintiff for £600. The public may easily over-rate the unreasonableness of a difference of opinion in such cases. Strictly speaking, no absolute opinion of the permanence of such injuries can be arrived at. It follows that one side takes the extremely favourable view, and the other the extremely unfavourable. The difficulty is in the nature of the facts and in the essential obscurity of nervous states.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

A SPECIAL general meeting of the Poor-law Medical Officers' Association will be held on Monday, the 7th inst. (originally proposed to be held on the 9th inst.), at three P.M., to consider how far the present operation of the Sanitary Act, 1872, is in accordance with the interests and future prospects of the Poor-law Medical Service and of advantage to the public, and how far it realises the expectations held out by the Bill in such respects.

TESTIMONIAL TO DR. KIRK.

A WELL-TIMED testimonial is about to be sent by the present monthly mail to Dr. Kirk at Zanzibar. The donors are members of the Royal Geographical Society, and the inscription on the principal piece of plate, of which the testimonial consists, is to the effect that the Society recognises the services he has rendered as Vice-Consul at Zanzibar to the Society itself, to his country, and to science, by his zeal, intelligence, and generosity in the furtherance of African exploration.

THE DEPUTATION TO THE LORD PRESIDENT.

OUR readers will find in another column a report of the result of a deputation from the Council to the Lord President of the Privy Council, to ascertain the feeling of the Government as to bringing in or supporting a Bill to enable any university or medical body that is willing to join in a conjoint scheme. The result is more of the nature of dust than light.

EDINBURGH UNIVERSITY.

A TESTIMONIAL signed by four hundred of his students was on Friday last (at the close of the winter session) presented to J. G. McKendrick, M.D., assistant to the Professor of Institutes of Medicine, as a testimony of their high appreciation of him as an original investigator and teacher of physiology, and in recognition of his having during the last *ten* winter sessions so successfully conducted the work of the systematic class on physiology during the illness of Prof Bennett.

A MADAME BRÈS lately passed her first examination for the Doctorate in Medicine in Paris, and the Secretary of the Faculty appended the following particulars to her certificate:—Madame Brès, married, and the mother of two children, has not taken to the study of medicine as a pastime, nor from scientific vanity. She practises all the duties of the profession. During the two sieges which Paris has so lately borne she never quitted the bedside of the wounded. The rain of honorary distinctions poured upon the ambulances passed by without falling upon her, the devotion natural to woman needing neither stimulus nor flattery.

DR. RICHARDSON, F.R.S., has been appointed by the President and Council of the Royal Society Croonian Lecturer for the present year. The subject of lecture is "Muscular Motion." Dr. Richardson is also a candidate for the Professorship of Anatomy in the Royal Academy, an office rendered vacant by the death of the late Professor Partridge, F.R.S. Dr. Richardson's capacity as a teacher is so well known that it is hardly necessary to urge his claims for the latter appointment.

THE mortality in London last week was at the rate of 24 deaths annually to every 1000 of the estimated population. In Plymouth the death-rate was as low as 15 per 1000.

WE would counsel any of our readers having friends or patients who from their inability to reconcile certain phenomena with known natural laws have been basking in the unhealthy glare of what is termed modern spiritualism, to take them to St. James's Hall to witness the marvellous entertainment now given there by Messrs. Maskelyne and Cooke. They will possibly come away with a conviction that the agencies at work in a spiritual *séance* are other than supernatural—belong, in fact, to *so* material a domain as that of trickery.

DR. FRANKLAND, in his report for the past month, states that "the Chelsea, West Middlesex, and Southwark Companies succeeded in efficiently filtering the muddy water; but the Grand Junction and Lambeth Companies delivered slightly turbid water, which contained moving organisms. The water of the Lea, supplied by the New River and East London Companies, was of better quality and was efficiently filtered before delivery."

FROM an article in the *Globe* newspaper it would appear that preliminary science must be at a very low ebb among the Edinburgh medical students. The paper in question makes merry over some of the answers given by candidates at a recent examination, and opines that the school-boards now being elected all over Scotland have a good deal of hard work before them.

IN the House of Commons on Tuesday night, Mr. Grant Duff, replying to Sir T. Bazley, stated that the question as to when the new Army Medical Warrant will be applicable to the medical officers of Her Majesty's Indian Army was now under consideration. It is not intended to make any change in the rate of pay of those who are now at home on sick leave.

ACCORDING to a return, called for by Major Arbuthnot, furnished to the House of Commons it appears that, from April, 1870, to the 31st March, 1872, no less than 8414 men deserted from the army. What with desertions on the one hand, and competition with the labour market on the other, Mr. Cardwell must have a difficult task in maintaining an army at all.

A DEPUTATION waited on Mr. Stansfeld a few days ago, with the object of urging upon the Government the necessity of immediate legislative action to enlarge the scope of the Artisans and Labourers Dwellings Act (1868), and to render the working of the same more effectual.

THE carcass of a horse was dissected in Edinburgh last week, with the result of extracting from the stomach a large dust-ball as hard as stone, about 23 inches in circumference, and weighing 8 lb. The animal had been fed on mill-dust.

MR. ALFRED HAVILAND will, during the summer session, deliver his ordinary course of lectures on the Geographical Distribution of Disease at St. Thomas's Hospital. Notice will be given of the commencement of the course.

ON Saturday last Professor Max Müller delivered a lecture at the Royal Institution on "Mr. Darwin's Philosophy of Language."

IT is said that Mr. Headlam intends to reintroduce the Medical Bill which he brought in and withdrew in 1871.

ACCORDING to the latest accounts dengue fever was extensively prevailing at Port Louis in the Mauritius.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MARCH 25TH, 1873.

DR. C. J. B. WILLIAMS, F.R.S., PRESIDENT, IN THE CHAIR.

THE PATHOLOGY OF LEPROSY; WITH A NOTE ON THE SEGREGATION OF LEPERS IN INDIA.

BY H. V. CARTER, M.D., BOMBAY ARMY.

(*Communicated by* DR. SYMES THOMPSON, *Hon. Sec.*)

IN this paper—the result of observations made in Western India during the years 1860 to 1871—leprosy is considered as a whole, and its diagnostic characters are stated to consist in (*a*) skin-changes, either produced by the well-known "tubercles," or evidenced by alterations of rather atrophic character, which result in a form of "eruption" corresponding in its typical manifestation to the "Leuke" of classical Greek writers, now widely known in Western Asia as "Baras," and having, it is thought, affinities with the "lepra" of Willan, &c, only that scales are wanting, owing to tropical influences on the skin. The name *Lepra leprosa* is suggested as suitable to this eruption. Superadded to these visible changes is (*b*) a prior and progressive impairment of the functions of the cutaneous nerves and branches, the structural alterations in which are regarded by the author as the characteristic lesion of leprosy. Hence result the marks presented by lepers, and one or other of which is the only infallible sign of their disease: the author knows of no characteristic prodromata. Subsequent changes are slow in progress, and are indicative of malnutrition of the frame both local and general, and hence susceptibility to corresponding hurtful influences. There are no symptoms of visceral lesions peculiar to leprosy; and while it is true that lepers die bearing the marks of their disease upon them, yet there is neither order nor uniformity in the time or mode of their decease.

Next are considered the morbid anatomy and histology of leprosy, and it is stated that the structural changes observed are due to exudation or deposit in the skin and appertaining nerve-trunks of a firm, translucent, colourless, or pale-reddish material, which may be distinguished by the borrowed terms hyalin-fibroid and hyalin-granular. As regards the skin, conjunctiva, and adjacent mucous membrane of the mouth and larynx, this deposit (here hyalin-granular) first appears within or immediately beneath the membrane proper; accessory organs, and even the blood-vessels, are secondarily involved, but it has been noticed that the tactile corpuscles disappear before other less sentient elements. As regards the nerves, this deposit (here hyalin-fibroid) first appears between the individual nerve-tubules, and within their sheath—i.e., the neurilemma of the funiculus; the outer envelope of connective tissue is hardly changed. By accumulation of the new material the tubules are separated, compressed, emptied, and eventually destroyed.

The microscopic characters of this leprous deposit are then referred to. The material looks exudative, but may be derived from proliferation of connective-tissue corpuscles; it undergoes slight development, and is susceptible of degeneration. In sixteen autopsies of lepers consecutively dying in hospital, no trace of deposit was noticed in the muscles, bones, or any of the viscera. The brain and spinal cord were wholly free from such deposit, &c.

Then are mentioned the general characters and distribution of leprosy in Western India. Reference is made to the author's late report on this subject published in the Transactions of the Medical and Physical Society of Bombay for 1871; the previous volume for the year 1862 containing a description of the symptoms and morbid anatomy of leprosy.

Particular attention is invited to the three circumstances, that the disease is capable of being hereditarily transmitted, that society in India is minutely subdivided by caste regulations into sections within which alone is marriage permitted, and that certain races (the primæval) are apparently more largely affected by the disease than any others: hence certain obvious inferences.

The author adds that neither climate nor endemic influence has been shown to favour or check the prevalence of the disease; faults of diet, hygiene, or habit equally fail to account for its varied distribution. The population generally is affected to the extent of 1 in about 1000 inhabitants, but the proportion differs in the several races, and hence in localities occupied by those races more predisposed than others.

The seat, nature, and causes of the leprous disease are then inquired into.

It is affirmed that, so far as manifested, its seat is the cutaneous system, evidence to that effect being negative and positive. The latter includes certain interesting features revealed on dissection which are pointed out; thus, the cutaneous nerves are affected only, or chiefly and primarily, in that part of their course between the skin and the deep fascia of the limbs or trunk; and when the deeper-seated nerve-trunks of compound function are diseased it is only their sensory elements which appear to be affected, and often those in continuity with skin-nerves; details are given. It is added that motor paralysis is seldom marked in lepers who can crawl on, or bend, the stumps, which are sometimes all that remain of hands and feet. The author considers that there are trophic nerves in connexion with those termed sensory; and that nutrition, as a process, may be directly influenced by the nervous system. It is submitted that all the essential phenomena of the leprous disease may be traced directly or remotely to the characteristic nerve-lesion.

As to the nature of leprosy, it is briefly stated that the existence of a dyscrasia or primary blood-change seems hypothetical and even needless; it may be said that the proximate cause of leprosy resides in a faulty condition of certain tissues of the integument—a defect perhaps of development, certainly a quality transmissible to offspring.

Etiology of leprosy.—Having regard to the fact that the inherited form of the disease is identical with that not known to be derived, the author surmises that the only true cause of leprosy may be hereditary or transmitted taint; or, in other words, a latent form of the affection itself. Respecting contagion, or inoculation, as causative influences, the author remarks on the absence of crucial facts. The grand test is necessarily wanting; and hence variety of opinion dependent on circumstances. As to endemic influences, it has been found that no one feature of air, soil, or water can be connected with the presence or frequency of leprosy. Europeans living long in India are virtually never affected with the disease. That malaria and leprosy are correlated does not appear.

An appendix has been added to this section of the paper referring more especially to the views of Professor Virchow.

Regarding the added note on the segregation of lepers in India, the author brings the subject forward rather to elicit opinion than to make assertion. It does, however, appear to him that the decline and extinction of leprosy in Europe during the middle ages is well and fully explained by the close, even if harsh, restrictions under which lepers were put by law and custom; and, holding this view, he would venture to recommend segregation as a fit measure for adoption in India, where the disease has been long established, shows no sign of diminution, and is constantly productive of much harm and suffering. Nor does there seem other hopeful way of eradicating leprosy; for, in the author's opinion, the view that improvement in hygiene and general progress will, or has, led to the extinction of this disease, is not sustained on a wide survey of available data.

THE PRESIDENT said the communication was one of great interest. The views on the pathology of the disease were somewhat novel; there appeared still a great deal to be made out on the subject. He thought there was some analogy to that strange disease, cretinism, both being of endemic origin.

DR. GREENHOW said he had paid considerable attention to the subject of leprosy, having served on a committee of the College of Physicians to inquire into the question of its contagiousness, and the advisability of the segregation of lepers. He did not think, after a careful study of the details of the disease, that it was contagious, but hereditary in its origin. The author of the paper seemed to ignore the fact that leprosy stuck to a district, as along the sea coast in parts of Norway, where the people are chiefly engaged in deep-sea fishing and live much on fish. Strangers going there and adopting the habits &c. of the inhabitants suffer from it.

Mr. ARNOTT said there was one point in the pathology about which he should like to speak—viz., the condition of the spinal cord. He had had an opportunity of examining one leprous patient, who had come from the West Indies and died in Middlesex Hospital. Danielssen in his account of leprosy in Norway, speaks always of the spinal cord being diseased, a varicose appearance from enlargements. From the description, this appeared due to a deposition of the same material which Dr. Carter calls hyalin-fibroid. He found the same change in the cord he examined; it was then two or three days after death, and might have been due to post-mortem change. Dr. Carter and all Indian writers saw no change, so perhaps the forms were not identical, and the changes observed in the cord in Norway may be due to the use of fish and fish oil.

Dr. BUZZARD was sorry the author of the paper was not present, as he should have liked to ask him one question. Dr. Carter said the sensory rather than the motor nerve-fibres were affected, and that the nerves were more affected when they emerged from the fascia and became cutaneous than when more deeply seated. Might not this be explained by the fact that the motor nerves—to the muscles—were given off more deeply, and only the last part of the nerve was cutaneous? He brought before the Clinical Society three years ago a case in which the question of heredity was involved. The father and two other members of the family were mutilated by the disease. He thought Dr. Carter was right in saying that the nerve lesion and not the cutaneous affection was primary. It was well known that cutaneous affections followed injuries to nerves, as was exemplified in Paget's case of injury to the median nerve. This was not so if the nerve was only compressed. So, perhaps, there was something like a neuritis in leprosy, an inflammatory condition of the nerve producing these changes.

A CASE OF AMPUTATION AT THE HIP.

BY RICHARD BARWELL, F.R.C.S.E.,
SURGEON TO CHARING-CROSS HOSPITAL.

Caroline L——, aged seven, was admitted into Charing-cross Hospital under Mr. Barwell's care September, 1872. She had previously been under the care of Mr. Hancock with severe hip disease, and that surgeon had in the early part of 1871 excised the head of the bone, but during the operation the thigh, a mere shell of bone, had broken in two places. She went out after some months with bony union, but with open sinuses. When readmitted at the above date she was emaciated and feeble; there were several open sinuses; the liver was much enlarged. After watching the case for some time, the operation was decided on, and performed by Mr. Barwell on the 2nd November. Hardly any blood was lost; the limb was almost devoid of muscles, the bone carious and inflamed throughout. The child rallied, and after a time (corresponding with the occurrence of smart diarrhœa) the liver began to diminish in size. On the 1st of February the child went out with the liver much smaller. Certain deductions concerning the states of liver in different phases of disease were given.

Mr. THOMAS SMITH said he should have been inclined to refrain from operating with such a condition of liver. The decrease in the size of the liver after the operation was interesting. He had had a patient in the Children's Hospital who had both the liver and the spleen greatly enlarged, so as almost to fill the whole abdominal cavity. Whilst suppuration was going on the liver became smaller, and returned to nearly its normal size. The spleen, however, remained as large as before. It had been proposed to treat the patient with potash salts, according to the views of Dr. Dickinson of the pathology of this enlargement in suppuration, as arising from dealkalinity of the blood. This, however, was not done, but the liver spontaneously decreased. There was said to be no deposit, only the liver, not going through its nutritive changes as usual, became full of cells in various stages of growth and degeneration; and the size of the liver was due to the retention of these. He would like to ask Mr. Barwell if he has ever held the abdominal aorta when thus operating.

Mr. ARNOTT said he was about to ask a similar question, as he had been struck with the small quantity of blood lost, about one ounce. He had seen the aorta compressed by Lister's abdominal tourniquet, and also by the hand, and little blood was lost; but he would like to know how the hæmorrhage was arrested in this case.

Dr. ANSTIE said he had been struck with the remark that the enlargement of the liver in these cases was due to a heaping up of cells. He always thought it presented amyloid characteristics, both as seen under the microscope and by the use of reagents. He should think that when the liver had been enlarged and then decreased, it was due to fatty rather than amyloid degeneration. He could say nothing as to the question of the dealkalinity of the blood. He knew that very little was to be done for the condition.

Mr. CALLENDER said that as the compression of the abdominal aorta had been alluded to, he would like to make a remark as to the mode of its application. The abdominal tourniquet was insufficient for the purpose, for it compressed the vena cava as well as the aorta. This was obviated by placing a narrow pad of lint directed from the right to the left, and then no pressure came upon the vein. If the vena cava was compressed there was great hæmorrhage from the large veins.

Mr. BARWELL, in reply, said that certainly, if operating on an individual with a large and well-nourished limb, he would have the abdominal aorta held. In this case the limb was emaciated, and so Mr. Bellamy passed in his hand under the flap, and at the same time compressed the aorta; only a little venous blood escaped, not so much as two ounces. As to the enlargement of the liver, he thought it was due, as Dr. Anstie said, to fatty degeneration, and that need not preclude any operation. If it depended on amyloid degeneration he should not like to operate. When bones were inflamed and carious, the liver was more likely to be fatty; if largely necrosed, most commonly there was amyloid degeneration.

ANATOMICAL RELATIONS OF PULMONARY PHTHISIS TO TUBERCLE.

THE important discussion on Dr. Wilson Fox's paper "On the Anatomical Relation of Pulmonary Phthisis to Tubercle" was commenced on Tuesday evening last at the Pathological Society.

Dr. MOXON, after expressing the diffidence he felt in following such a speaker as Dr. Wilson Fox, said he was the less anxious to express his views since for the most part he concurred with what Dr. Fox had said so gracefully, forcibly, and pointedly. He would be sorry to see those views weakened by pointing out any divergence in his views. Since he had come almost to the same conclusion, he would be pleased rather to hear what others said who held opposite views. His own views on the subject had been formed for some years, and he had expressed them on previous occasions to the Society. But as the discussion demanded it, he would take the liberty of stating where Dr. Fox's views fell short of the point. Dr. Fox's propositions might, he thought, be summed up thus:—1. That miliary tuberculosis of the lung has neither the anatomical nor histological constancy or peculiarity commonly ascribed to it. 2. That miliary tuberculosis, in short, exhibits all the products found in active chronic phthisis. 3. That all the other products constituting caseous pneumonia under various forms are essentially of the same histological structure which Dr. Fox thinks is characteristic. 4. That the other characters of chronic phthisis are fairly traceable to the effects of time. 5. Due attention has not been given to the developmental changes that occur in tubercle. In short, he did away with the peculiar nature of miliary tubercle by affirming its essential substance to exist in all caseous phthisis. He reasserts the identity of all phthisis as based on this peculiar microscopic matter, and, finally, he excludes common catarrhal pneumonia entirely from phthisis. Shortly, this would be the difference between Dr. Fox's views and his own, that he did not hold with Dr. Fox that the basis of the definition of phthisis should rest on purely histological grounds. He was sorry to see the word "adenoid" brought forward in the discussion: it was a dangerous word; the term was bigger than the meaning, it seemed to mean much, but yet conveyed very little. What did it mean? Shortly, it meant resembling lymphatic gland structure. Did Dr. Fox then say that tubercle resembled the structure of lymphatic glands?

It was only the remotest resemblance, and was far from being identical. There were many other adenoid substances, as of leukhæmia, syphilis, &c., and those described first by Dr. Sanderson as adenoid tissue around the nerves in Addison's disease. The word was vague. What was adenoid in tubercle? All he could find was a number of cells, but they were nothing like lymphatic cells, nor was the intercellular substance. He would have liked to show drawings of adenoid tissue seen in a blood-clot; this appearance was always met with if there were enough white corpuscles. What he meant was this: though adenoid, it was nothing particular, and he would not like to rest the unity of phthisis on such a basis. It was an easy thing to attack the position of others, but he would rather add something positive to the matter which had been brought before the Society. A child was injured by a cab, and brought to Guy's Hospital and died; he examined the body. The medical aspect was interesting. It had had severe bronchitis (at least he assumed that), and there was caseous enlargement of the lymphatic glands about the trachea; the mucous membrane was pulpy. The lung near the glands was stuffed with miliary tubercle, concentrically arranged around the glands; so the glands were the foci of the disease. Remembering the inoculation experiments, one would say there were three changes—1, chronic catarrh of the trachea; 2, caseation of the glands; 3, tubercle of the lung. Now no one would say the catarrh was specific, but that the tubercle was; yet caseous degeneration through inoculation can produce the same kind of disease, so that from non-specific to specific a series, where does specificity arise? Looking from inflammation to tubercle one saw in tubercle only a branch of inflammation, somewhat similar to what Dr. Sanderson had proved by his paper before the Society last year. Why should tubercle be called specific more than pyæmia? There was nothing specific in tubercle; if inflammation was set up in a person he might be said to be on the high road to tubercle. Since we can define its cause it is not specific. If tubercle is a development of inflammation, how near are we to Niemeyer's views. He certainly says something like this. But he (Dr. Moxon) would oppose it through thick and thin. Niemeyer, taking up Buhl's theory—the possibility of auto-infection by caseous matter,—at once says it occurs through this particular disease. Hence the weakness of the views. He believed it followed caseation, but would not say from catarrhal pneumonia. He had never seen a case of incipient phthisis without tubercle, and the earlier the stage the more the tubercle. As to the origin of phthisis, he had little to say; he had his theories. He would like to say a few words about the so-called fibroid phthisis. He did not know if any of its asserters were present, but he must express his conviction that it was a very unfortunate idea of theirs as far as pathology was at all concerned in it. It was clear and plain, from the very defining descriptions themselves, that fibroid phthisis was nothing more than old phthisis, in which a good deal of fibre was necessarily present. Those who erect it into a distinct kind entirely disregard the fact that tubercle is short-lived. No tubercle lived three months, so that in five or six years—and it is naïvely given as a property of fibroid phthisis that it lasts such a time—generations after generations of tubercles must have come and gone, doing their natural work in destroying—first their matrix and then themselves, and leaving behind them the scar of fibre in which the nature of our bodies always enshrouded the traces of such mischief. But the author of fibroid phthisis, seeing the fibrous accumulation around these ancient remains, can think of nothing but their present state, and like a translator who has only one tense, renders the preterpluperfect, perfect, past, and present all alike by his one present tense, just as if one called an old united fracture an osteoid broken leg, or spoke of scars on the skin as fibroid lupus.

Dr. CAYLEY said that while no description of the changes which are met with in phthisis could be more complete and accurate than that which had been given by Dr. Wilson Fox, he thought that the doctrines founded on this description were open to some exception. It was well known that the so-called adenoid tissue, which Dr. Fox appeared to regard as the most characteristic element of tubercle and to be the result of an irritative overgrowth of pre-existing lymphatic elements, might be produced in parts of the body by almost any kind of irritation. It occurred, for instance, in the margin of a hard chancre, in a soft node, in early stages of cirrhosis of the liver, and in the lung it might be produced in the interstitial tissues and the walls of the air-cells by a great variety of causes, as the presence of a foreign body, the inhalation of irritating dust as in grinders' phthisis, chronic pneumonia, or pleurisy. If, therefore, adenoid tissue be distinctive of tubercle, tubercle cannot be distinguished. Many of the more recent writers on this subject give a very different interpretation of the structure of a grey granulation—Rindfleisch, Wahlberg (in his recent paper on tubercle of the larynx), Schüppel, &c., who all describe tubercle as made up in great part of large cells. Professor Schüppel, as is well known, regards the multinucleated giant cell as the most essential element of tubercle, and describes how it gives off processes which form the reticulum, in the meshes of which the other cells lie; and he considers the adenoid tissue which surrounds and is mixed up with this structure to be the product of simple irritation. Dr. Cayley exhibited specimens showing this structure. Dr. Fox, however, regarded these larger cells as of secondary importance, because they were frequently absent from tubercle of the lung. This might be explained by the fact that in so-called tuberculosis of the lungs true tubercles are often not present at all. Dr. Cayley thought that the general scope of Dr. Fox's argument was this:—Finding in the lungs of children affected with acute tuberculosis, in addition to the grey granulation, a great variety of other changes, which he has so fully described, he assumed that this must also be tubercular, because they are found associated with tubercle, and then finding in the lungs of adults affected with chronic phthisis these other changes to be predominant, while the grey granulation is often absent, he still regarded them as tubercular—an argument by no means necessarily valid. Dr. Cayley therefore thought that, though the question was not yet ripe for a final decision, we were still entitled to maintain, at any rate provisionally, and as affording at present a better explanation of the facts, that the term tubercle ought to be restricted to the grey granulation, which does not merely consist of a mass of adenoid tissue; that in many cases of chronic phthisis no tubercles are present at all, and in many other cases, when present, they are secondary to the pre-existing inflammatory processes, and are very likely produced in a manner in which they may readily be produced in the lower animals, by caseous infection.

Dr. BEALE.—In the main I agree with the account given by Dr. Wilson Fox, but I am sorry to say that I differ from him in one or two important particulars. With regard to the nature of the tubercle-corpuscle, I cannot think with Dr. Fox that it has anything to do with the lymph-corpuscle, or with the cells of adenoid tissue. Neither do I think that it is even proved that the walls of the air-cells of the lung are covered with an abundant plexus of lymphatic vessels, as I understood Dr. Fox to admit. I have never myself seen any appearance which would justify such a conclusion, although there can be no doubt that lymphatics are exceedingly abundant under the pleura. Neither do I understand how any process that may be denominated irritation can convert one of these lymphatic corpuscles into a tubercle corpuscle. It seems to me that the term irritation is rather too freely used. I am afraid there are very few here who if called upon could give a definition of what they mean by the process of irritation, and if we were to discuss the view of Virchow, I am sure every one would come to the conclusion that Virchow's doctrine of irritation could not be substantiated in any way whatever, for it almost leads to the ridiculous supposition that minute particles of protoplasm, or bioplasm, or whatever it may be called, have the power of sympathising with other particles. The term irritation may almost be looked upon as the Abracadabra of pathology. I hope that before long it may be ranged with such terms as vacuolation, fibrillation, differentiation, and many others, the use of which during the last few years has been abandoned, or at least less met with in pathological literature than was formerly the case. From an observer's point of view the question—What is tubercle?—is undoubtedly a difficult one to answer. It seems to me that tubercle, like much other matter in the body that has received a definite name, consists of living matter. There is no doubt that tubercle, like pus and cancer, possesses the power of growth and multiplication. But there is a great difference in the living matter of tubercle, and that of a

white blood-corpuscle, of a cancer cell, or of any other cell in the body. These different forms of living matter could not be distinguished under the microscope, or by any means yet known. We must give up the hope of ever finding any characteristics which shall enable us definitely to say that a particular object is a tubercle-corpuscle, cancer-cell, or any definite form of living matter. We are not therefore compelled to assume that these are identical. They all have great differences which are remarkable, although they may not be open to observation or to be demonstrated by chemical tests. The life of all these particles of living matter is very different. The pus-corpuscle grows and multiplies at a rate very different from that at which the tubercle-corpuscle grows and multiplies, or a cancer-cell grows and multiplies. The pus-corpuscle lives faster than the tubercle, and the tubercle-corpuscle lives faster than the cancer-cell. The tubercle-corpuscle also differs with regard to the materials furnished by its death. The substances resulting from the death of the cancer-cell are different from those which result from the death of a pus or tubercle corpuscle. So that although these different kinds of matter are all living and all multiplying, and agree in many common characteristics, they have important differences. I think we should no more be expected to distinguish the living matter of tubercle from the living matter of pus or cancer than the cells composing the embryo of a chick from those composing the embryo of a dog, which, though alike under the microscope, have properties that are anything but identical. It seems to me that although it may be impossible for anyone to say that this or that is a tubercle-corpuscle, we must assent to the doctrine that a tubercle-corpuscle is a special thing; and I agree with Dr. FOX, that underlying many of these changes are tubercle-corpuscles, although in many of these cases the characters of the tubercle-corpuscles themselves may differ. In an ordinary tubercle we have of course many different structures—products of inflammation, of changes in adjacent tissues, and so on. It would be as impossible to distinguish any one of these compound masses of different forms of living matter as to distinguish the corpuscles of the embryo of one animal from those of that of another if they were mixed together. Under different circumstances, no doubt, the tubercle-corpuscle will give rise to a differently formed material, fibrous, soft, glistening, or a matter which may at last degenerate into that which we know as caseous substance.

Dr. CHARLTON BASTIAN said: The question which has been so ably discussed by Dr. Wilson Fox is one of so important a nature, and at the same time one concerning which so much difference of opinion has always existed, that it would seem most useful for the different speakers in this debate to set forth as concisely as possible the views which they themselves entertain upon the general question, without entering too much into matters of mere detail. I shall therefore follow the example of Dr. Wilson FOX, and endeavour, as briefly as the complexity of the subject will allow, to set forth the nature of my views concerning the relation of "tubercle" to pulmonary phthisis, with no more reference to the opinions of others than is necessary for my own exposition. And if these views are found to differ, in some respects, very much from those which Dr. Fox has expressed, I feel sure that he will, nevertheless, be one of the first to recognise the desirability of looking at the question from all sides. I may, however, state at the commencement, that any discordancies which may appear between my own opinions and those of others will not be so much differences with regard to facts, as differences concerning the interpretation and mutual relation of facts about the reality of which we are all more or less agreed. It seems to me, in the first place, quite impossible adequately to consider the question of the nature of tubercle, and its connexion with pulmonary phthisis, wholly without reference to the relations of such a product to chronic inflammatory changes, to scrofulous changes, to the new growths known as lymphomata, and to those met with in leucocythæmia, and other morbid conditions. It appears to me also highly inexpedient to consider the lung affection alone, and wholly apart from the light which may be thrown upon the question before us by a brief consideration of parallel morbid changes in other organs. It is the treating of the question in this isolated manner which, as it seems to me, alone makes it possible to consider as legitimate, or expedient, views which may tend to introduce much needless confusion into pathological science. Taking up the involved question as to the nature of tubercle at that stage in its history to which it had been brought by the labours of Addison, Reinhardt, Virchow, and others who had preceded them, we find that it presents itself somewhat in this fashion. The notion that caseation, or cheesy degeneration, constituted the essence of tubercle, was thrown aside as one which a larger and more minute experience could in no way sanction. The characteristics relied upon by Laennec and others had been shown to be almost wholly valueless as characteristics of any special and peculiar something which it had become the fashion to name tubercle. The masses previously so named were shown to be in the main mere products of chronic inflammation in different tissues and organs. And inasmuch as such products, both in their incipient and in their advanced stages, were specially abundant in the lungs of persons dying from pulmonary phthisis, this affection became one of which tubercle could no longer be considered as the pathological essence. It was now known that epithelial impactions from overgrowths in the bronchial tubes, and fibroid indurating infiltrations of a chronic inflammatory nature, were in the main the special tissue-changes which subsequently gave rise to the various lesions of chronic phthisis. The word "tubercle" having been thus restricted in its meaning, what remained to which the name could be applied? Only one product, which Laennec had been in the habit of regarding as an early condition of a deposit destined subsequently to undergo the caseation supposed to be characteristic of tubercle. It is true that Laennec's central idea had been shown to be erroneous; it may be true also that the body upon which the name of tubercle was now to fall had originally been described by Bayle as a non-tubercular substance.* This product was the "grey granulation," a body now known to have a constant and invariable structure, in the main resembling that of lymphatic gland tissue. It was, and is, the anatomical mark of an obscure general affection, having no necessary connexion with phthisis in the strict sense of the term—that is, as an ulcerative lung disease; it was a product prone to occur in more or less abundance within the cranium, within the chest, and within the abdomen of persons suffering from what we now term acute tuberculosis. But if this obscure and protean febrile affection, in which grey granulations are found disseminated through the organs, has no necessary relation to phthisis, on what pretence can it be called by its present name, and what possible reason could be assigned for giving to the grey granulation the mere name of tubercle, when the essential meaning of the term—that of a caseating product productive of phthisis—had previously been so different? To which questions it seems only possible to return the following replies:—In the first place, we must assume a deeply-rooted reluctance wholly to cast aside the word "tubercle," a word which, up to this period, had borne such an important connexion in men's minds with phthisis—although phthisis had now been fully shown to be a non-tubercular affection in the past sense of that term. And, secondly, because there was a very flimsy justification for such a course. Although this obscure febrile affection, acute tuberculosis, is one which may occur quite independently of any traces of phthisis, still it has a special aptitude also to occur as an intercurrent affection in the course of chronic phthisis. Grey granulations are therefore to be met with at times in the lungs of those suffering from phthisis. For this reason, and because they were bodies possessing the knotty or granular characters which were originally implied by the term tubercle—because, in addition, they everywhere possessed a constant structure, Virchow and others were content to let the name "tubercle" rest with them, although it must have been fully recognised at the time that such bodies had no necessary connexion whatsoever with pulmonary phthisis as a chronic destructive lung disease. A few years ago this point of view was very widely accepted by pathologists in many parts of Europe. In the time of Laennec, pulmonary phthisis, in its common forms, meant tubercular disease of the lung, and tubercle was regarded as a "specific" product. Forty years later, the common varieties of pulmonary phthisis were regarded as due almost solely to various forms of chronic inflamma-

* On re-reading Bayle's four cases of uncomplicated "Granular Phthisis," I have become convinced that M. Thaon is right, and that these could not have been cases of what we now understand as acute tuberculosis.

tory changes in the lung; tubercle was regarded as a mere occasional and quasi-accidental complication: both phthisis and tubercle were robbed of their so-called "specific" attributes. This was the kind of view into which I finally drifted about the year 1866, recognising, however, fully, that the word "tubercle" had attained a thoroughly artificial meaning, wholly different from its original signification, and that the preservation of the name was one of questionable expediency. Now, however, we see a powerful reaction setting in, and a marked tendency to restore to some of the old "infiltrations" the name of tubercle, so as at the same time to make phthisis again an essentially tubercular affection. What wranglings and never-ending disputations the very prospect opens up! What, it may be asked, is the meaning of the new point of view? We must endeavour to answer this question first, before attempting to come to an opinion upon the desirability of reverting to what one might almost venture to call an old and worn-out doctrine. The reasons which have been most influential, are, I think, not difficult to find. Most valuable investigations have of late years been made, both here and abroad, upon the so-called "artificial production of tubercle," and many of those who had carried them on had adopted the views of Virchow concerning the limitations to be attached to the word tubercle. Now the rodent animals, and guinea-pigs especially, are, in more ways than one, very peculiar creatures—so peculiar, as it seems to me, that it is not altogether safe to pass judgment offhand concerning the similarity of certain processes which may be set up in them, to those which are known to occur in the human subject. We now know that this artificial so-called tubercular affection may be initiated in guinea-pigs by the mere introduction of an ordinary irritant into and beneath the skin of the animal. Whether tubercular or not, therefore, the affection established is one which, in the old sense of the term, can have nothing very "specific" about it. The growths set up by local irritation gradually spread to lymphatic glands, and subsequently internal organs, such as lungs, liver, spleen, &c., also become affected. Such growths were at first believed by Villemin to be tubercular simply because they had followed the inoculation of "tubercle" beneath the skin of the animal, and because such a result was deemed harmonious with the supposed specific nature of the inoculating substance. But when it was clearly shown that ordinary chronic inflammatory products—even that the introduction of a mere seton beneath the skin—might give rise to similar morbid conditions and products in guinea-pigs, this reason became no longer of any avail. Something was, however, to be said, in favour of the lesions being tubercular, owing to the nature of the growths themselves. They had, in the main, the characteristic lymphoid or adenoid structure which the grey granulation of acute tuberculosis possesses. But was this similarity sufficient to make it absolutely necessary to consider that the condition so frequently established in the Rodentia was tuberculosis, and that the lesions were tubercular? This is a most important question for pathological science, and one which, as it seems to me, was never very adequately considered by those who were themselves engaged in these most interesting and important investigations. I cannot too strongly draw attention to this stage of the argument. Here was a generalised affection set up in guinea-pigs, marked by new growths, in the lungs and other organs, which presented the microscopical characters of lymphatic tissue. Was the histological constitution of the growths alone sufficient to justify us in calling these products tubercular? This question, thus nakedly put, would, I believe, have been unequivocally answered in the negative by many pathologists. None of the modern pathologists who had accepted the views of Virchow have ever pretended that the grey granulation had any characteristics specific and peculiar to itself. It was always recognised to be of the lymphoid type, and it was always admitted that growths in no way distinguishable from it histologically were to be met with in the organs of persons suffering from leucocythæmia and other allied affections. Growths of the lymphatic gland type—but to which no one thought of attaching the name tubercle—were in these affections more or less disseminated through different organs and parts of the body. Obviously, therefore, mere histological structure alone could give us no right to look upon the new growths in guinea-pigs as tubercular. As I have before endeavoured to point out, it was the grey granulation of acute tuberculosis which pathologists had arbitrarily agreed, in default of other products, to regard as the only true tubercle. If, therefore, this body was admitted to have no specific structure, if other products histologically similar were not named tubercle, then it becomes clear that the notion of tubercle was arbitrarily centred, not so much in the histological characters of any individual product, as in its structure combined with its mode of occurrence in individual organs and throughout the body—it had become centered, in fact, in the grey granulation as the sole specific and invariable mark of that general constitutional affection known as acute tuberculosis, rather than in any mere form and histological characters of the grey granulation itself. Thus, the real question to be considered came to be, whether the general affection set up in the rodent animals was or was not identical with the febrile affection in man which, in the strict acceptation of the term, goes by the name of acute tuberculosis. I know not whether the question was ever argued out in this manner by others. It was obvious, however, that the majority of pathologists were quite willing to call these growths in the rodent animals tubercle, and the general condition itself tuberculosis. To this view I was never able to give in my adhesion. My difficulty arose from the fact that I was unable to see a real identity, such as appears to some, between acute tuberculosis as it occurs in man and the affection which could be so easily established in the Rodentia. The mode of origin; the comparatively slow and gradual spread of the guinea-pig affection from organ to organ; the almost invariable absence of growths in the brain or meninges; the mode in which lungs, liver, and spleen were affected—the wide-spread infiltrations and the greatly increased bulk of the latter organs—were all in striking contrast with acute tuberculosis as it occurs in the human subject. For in this latter affection we find an obscure origin, and the more or less sudden outbreak of an acute febrile malady which almost invariably leaves some marks upon the meninges, and in which the strictly essential anatomical lesions were minute granulations, either separate or aggregated, scattered through organs of almost normal size. With such differences staring us in the face, and with the patent, though by no means insignificant fact, that the means which sufficed for inciting the affection in question in the Rodentia were wholly incapable of setting up acute tuberculosis in man, it has always seemed to me to be very difficult to come legitimately to the conclusion that the two affections were similar, and therefore equally difficult to come to the conclusion that the products found in the rodent animals have any real right to be considered as tubercle. My interest in these investigations and notions concerning their importance are, however, not in the least diminished merely because I do not feel justified in applying a particular name to the morbid conditions or products themselves. These doubts, however, which I still very strongly entertain, concerning the propriety and legitimacy of the present generally received views as to the name which should be attached to the affection in the rodent animals, have not been shared by others. Foreign investigators, as well as Dr. Wilson Fox, Dr. Burdon Sanderson, and others in this country, have not hesitated to look upon the condition as tuberculosis, and upon the products as tubercular. Nay, more, Dr. Sanderson stated nearly four years ago, in a communication which appeared in the *Edinburgh Medical Journal* for 1869, that the occurrence of "infiltration," in which large patches of lymphoid new growth appeared in the liver or other organs of the guinea-pig, should suffice to open our eyes with regard to the different forms in which tubercle might manifest itself in the human subject. This, if I might venture to say so, was the insertion of the thin edge of the wedge which Dr. Fox has now, with so much vigour, endeavoured to drive home. Already there was the dawning notion that infiltrations and chronic inflammations were again to have their day as tubercular products. I mentally shuddered at the chaos into which—I say it with all respect—it seemed to me we should again be introduced, and I was by no means comforted by the fact that new doctrines of "infection" were to be introduced with the view of explaining multiple morbid processes in general. In Dr. Sanderson's opinion, tubercles are adenoid bodies (or lymphoid patches) enlarged; and, for the establishment of phthisis three things are necessary: (1) a constitutional

predisposition, (2) a local irritation leading to an increased growth of pre-existing lymphoid structures, and (3) a process of infection, by means of which the morbid growths extend to adjacent or related parts. Concerning this process of infection, Dr. Sanderson says: "The word designates the fact that, wherever a chronic induration *due to overcrowded corpusculation* exists in any organ, it is apt to give rise to similar processes elsewhere." Dr. Sanderson would apply these views even to the mode of extension of "the so-called infiltrated forms of induration" met with in ordinary cases of phthisis. Here, then, the tendency was strongly manifested to consider that all infiltrating fibroid indurations which were marked by an "overcrowded corpusculation," might spread by a process of infection, and the logical outcome of the views stated was that such infiltrating indurations were tubercular in nature. The transition to such a belief is all the more easy because, as I have before insisted (Pathological Transactions, 1868, p. 54)—in anticipation of what has followed—rapidly advancing fibroid over-growths in their early stages are as notable for their number of corpuscles as the most typical lymphoid tissue. The two differ, in fact, merely in the degree of perfection of their intercorpuscular stroma, although almost all transitions are to be met between the two. That difficulties may sometimes exist in distinguishing between such products seems also to be the opinion of Dr. Wilson Fox, since he says, "The reticulum under a microscope with high powers is to be found in almost all forms of tuberculosis except in the most recent granulations, and there nuclei and small cells crowd upon one another, forming a dense mass, and no reticulum can be seen." The views which Dr. Wilson Fox has now so ably expounded will thus be found essentially similar to those which were more or less explicitly stated by Dr. Sanderson; and I cannot doubt but he also has been largely influenced by considerations similar to those which have found favour with Dr. Sanderson. It is true Dr. Fox claims to have an additional warrant for his views by reason of the fact that, in the lungs of children dying from acute tuberculosis, infiltrating corpuscular lesions are to be met with in addition to grey granulations in different stages. Such a fact, however, as it seems to me, can have no real title to induce us to modify our views, when we recollect that the restricted signification of the term tubercle, adopted by Virchow and others, was confessedly arbitrary, and necessitated by the complete overthrow of the old doctrines as to the nature of tubercle. Almost all forms of phthisis had previously been regarded as tubercular, under the belief that a "specific" and peculiar product was almost invariably present. Afterwards it had been shown that the substance previously supposed to be specific had nothing peculiar about it, and was the result of common inflammation in various forms, and that none of such products were worthy of the name tubercle; although, as a mere concession, pathologists were willing to allow this name to be retained by a product (the grey granulation) which was an occasional accompaniment of phthisis. It is literally true, therefore, that in the minds of those who had accepted his position, "tubercle had come to be a mere accidental complication of phthisis, and in no respect its chief anatomical distinction." And as it seems to me the fact that an arbitrary signification of the term had been consented to as a mere compromise, and simply with the view of retaining the old name for something—even when its original meaning had been entirely taken from it—is lost sight of by Dr. Wilson Fox, when he now comes forward and urges us to accept a new signification of the term merely because, in acute tuberculosis as it occurs in children, pathological products other than the grey granulation are apt to be found, although such extra products are confessedly not necessary elements of the disease. It seems, moreover, to me almost wholly beside the question to say, as an additional reason for the adoption of the new views, that "proof is wholly wanting that tubercle in the lung can appear in no other form than the isolated grey granulation." No proof was even attempted to be given: we must again urge the fact, that the restriction in the use of the term was from the first confessedly though advisedly arbitrary. The products which Dr. Wilson Fox and Dr. Burdon-Sanderson would now have us include under the name tubercle were therefore amongst those which, amidst the shipwreck of the old term, were deliberately cast aside. They were known and recognised as products of an irritative or chronic inflammatory overgrowth, under the names of interstitial pneumonia and fibroid indurations. Such products, not only in the lung, but also in other organs, are, as is well known, very largely, and often almost exclusively, made up of minute corpuscular elements similar to those occurring in lymphoid tissues. And if in some cases these overgrowths, or portions of them, as they occur in the lungs or other organs in man, have a still more exact resemblance to lymphoid tissue, the reason of this has now been made perfectly clear and simple to us, owing to the important discovery by Dr. Burdon-Sanderson that very minute patches of lymphoid tissue are normally present in the peribronchial tissue of the lung, and upon the walls of the vessels in other organs. This being the case, what could we expect but that under the influence of such disturbing or irritative influences as lead to the overgrowth of the connective-tissue elements in any region of the lung, these intimately intermixed patches of lymphoid tissue should also undergo an irritative increase or hyperplasia. But, in the face of all that has been said, is this a justification for calling such bodies tubercles? Certainly not; no more than the possession of a similar histological structure was a sufficient warrant for immediately calling the morbid products met with in the guinea-pigs tubercle. If we are now to suppose that tubercle can be described broadly as "an adenoid body enlarged," or as a "lymphatic overgrowth produced by irritation," what are we to say of the lymphatic overgrowths which occur in the liver in leucocythæmia? Are they also tubercles? Again, what are we to say of a mere irritated and enlarged lymphatic gland? Is this a tubercle? Or is the body no longer tubercle when it attains a certain size? Everywhere, as it seems to me, such views as have now been advocated land us in nothing but confusion. If the word tubercle is be retained at all, we cannot start beyond the narrow circle of the limited and confessedly arbitrary signification given to it by Virchow and others, without plunging ourselves into a mere whirl of inconsistencies and contradictions. Let it not be supposed, however, that I am in favour of retaining the word—even with the limited signification given to it by Virchow. No; it seems to me, for many reasons, by far more expedient to renounce its use altogether. To this opinion I have come slowly and deliberately, after an experience of several years in teaching the present doctrines. Year by year I have been more and more impressed with the altogether gratuitous and unnecessary difficulties besetting the path of any teacher who endeavours to explain to students what is and what is not tubercle, and why any given product is or is not honoured by such a name. The principal difficulties seem to me to be of this nature. First, there is the fact that in ordinary chronic phthisis some of the lesions are most prone to appear in the form of granulations either simple or aggregated, although such granulations have nothing whatever to do with acute tuberculosis in the strict sense of that term, and therefore have no right to the name tubercle. Such granulations may be softer than the ordinary grey granulation, owing to their containing a larger proportion of epithelial elements or of their derivatives; others may be harder and more pigmented; whilst others still may, both in naked-eye characters and in microscopical appearance, be almost indistinguishable from the grey granulations of acute tuberculosis. And yet there is oftentimes not the slightest suspicion that acute tuberculosis has existed—far from it; growths of this kind are occasionally to be met with in such a mere local, though chronic, disease as cirrhosis of the lung. In one of the most typical cases of this affection, where the opposite lung was healthy, and where no granulations were to be found in other organs, the part in which the fibroid consolidation was still advancing was thickly studded with minute granulations, having microscopical characters closely resembling those found in acute tuberculosis. Again, take the affection commonly known as "tubercular peritonitis," but which I prefer to call granular peritonitis. Here the parietal and visceral peritoneum is more or less densely overgrown with granulations, presenting a truly lymphoid structure. Yet such an affection has, as I believe, no necessary connexion whatsoever with acute tuberculosis. If we would be consistent, therefore, we must say that the products are not tubercular. Occasionally, such growths in the peritoneum and omentum are more lawless still: the reticulum is not developed; we have

nothing but a prodigious overgrowth of minute corpuscular elements, so exuberant, however, that the growth may win for itself the more dignified appellation of "cancer." Again, the correlation between lymphoid overgrowths and mere ordinary irritative overgrowths of connective-tissue elements is most close. In the five or six cases in which I have made an examination of persons dying from well-marked granular peritonitis, I have found the liver similarly and very characteristically altered. The organ has been more or less enlarged, pale in colour, and minutely mottled both on its external surface and on sections. What appeared to be minute, pale, and yellowish granulations, were thickly sown through a basis-substance, much of which had a more or less pellucid appearance. On microscopical examination, the pale and yellowish areas were found to correspond to islets of liver-cells more or less distended with fat, or simply granular and bile-stained, these areas being imbedded in an enormous new growth of tissue which had replaced the proper liver-substance. The new growth consisted, in part, of distinct fibre-tissue; in part, of a mere nuclear overgrowth, amongst which there was no definite reticulum; and in part, though in much smaller quantity, of more distinct patches of characteristic lymphoid tissue. On the other hand, kidneys, spleen, lungs, brain, and meninges have been entirely free from any characteristic or constant changes. There has been no evidence, therefore, of the existence of acute tuberculosis. What I have already said may suffice to indicate a few of the difficulties besetting the path of the teacher, who, seeing the destructive snares which lie in wait for him if he venture beyond the narrow circle of a confessedly arbitrary definition of tubercle, tries what he can do to keep within these narrow and monotonous limits. Attempt to step beyond these bounds, and see what follows. In answer to the question, what is tubercle? let one who is disposed to be adventurous, reply, in the terms of Dr. Fox and Dr. Sanderson, that it is a new growth, lymphoid in nature, and resulting from a hyperplasia of a pre-existing nidus. The preservation of the word "tubercle" is beset with difficulties. No one knows what another means when the term is used, nor can he explain his meaning without entering into tedious statements. We have all this worry about a word we can perfectly well do without. The facts themselves will not be weakened by giving up the use of the word, but will be rendered more significant. A few words will indicate the views which would be accepted if the word tubercle was sunk altogether. The affection we have spoken of might be thus characterised:—1. The disease—acute tuberculosis—might be spoken of as granulia, a name given it by M. Empis. All the facts known concerning the disease would remain the same. 2. Tubercular peritonitis might be spoken of as granular peritonitis: the condition has no necessary connexion with the acute general disease granulia. All the known facts concerning its natural history would remain the same. 3. Intermediately between these two affections we should place the lymphatic affection in the rodent animals, the so-called artificial tubercle, the characteristics of which have been well described. 4. Two allied affections as distinct from pulmonary phthisis, and which are characterised by disseminated new growths having a lymphoid character—viz., leucocythæmia and the affection named adenic by Trousseau. 5. Lastly, we have the great majority of cases of pulmonary phthisis—a malady which has nothing more "specific" than belongs to chronic Bright's disease in the kidney. It is the various proportions in which these different kinds of lesions exist in different cases, combined with their different stages of evolution or decay, which accounts for the varying appearances presented by one case of phthisis as compared with another. In the main, these tissue changes, as almost every one admits, belong to three different categories. They are as follows:—(*a*) *Epithelial or more or less purulent impactions* within the bronchi and air-cells, occupying areas of very different sizes, and presenting different colours of grey or yellow, according to the amount of fatty degeneration or caseation which they have undergone. Changes of this kind are more or less intimately intermixed with those which follow. (*b*) *Fibroid overgrowths* resulting from a hyperplasia of connective-tissue elements in different parts of the portion of lungs affected; these being characterised by tissues presenting every grade of structure or variety between mere nuclear overgrowths of an embryonal character and the densest fibro-cartilage. (*c*) *Lymphoid overgrowths*, more or less inextricably interblended with tissue-changes of the kind last mentioned, due to an irritative hyperplasia of the normal lymphoid patches which are to be met with around the bronchial tubes and their minute ramifications. The changes described under *b* and *c* together constitute the well-known *indurating infiltrations*. The two kinds of changes occur in intimate union; and the more characteristic lymphoid hyperplasias shade away insensibly into the ordinary embryonal or nuclear overgrowth of the connective-tissue elements. The amount of actually developed fibre-tissue in this intermixture of *b* and *c* increases with age or in proportion to the slowness of its evolution. As Dr. Fox has so forcibly pointed out, the tendency to undergo caseation or cheesy metamorphosis is by no means confined to the epithelial impactions; it extends also to these indurating infiltrations, and is generally well marked in direct proportion to the rapidity of their evolution and the abundance of their corpuscular elements. The more acute the cases of phthisis, the more apt are we to meet with a predominance of mere epithelial or purulent impactions; whilst the more chronic the cases, the more abundantly do we find the indurating infiltrations and granulations above referred to. It is, however, as Dr. Fox has remarked, almost impossible not to get some amount of the other change where either of them exists to any well-marked extent. Taking into account the ulcerations, pigmentations, and other changes which these morbid tissues and products are apt to undergo, all the anatomical characters of pulmonary phthisis are explicable enough, without the necessity of our ever having recourse to a word the very mention of which suffices to summon to the mind a confusing cloud of unproved assumptions and conflicting theories. And if the lesions themselves of pulmonary phthisis can be fully explained without resort to or occasion to use the word "tubercle," this is also certainly true concerning the general constitutional condition associated with the malady, and concerning anything we may know or say as to its hereditary nature. Those who have occasion to use the phrase, "tubercular diathesis," will find themselves none the less wise if, in future, they speak or think of a "phthisical diathesis." And, surely, nobody in these days, when so much more is known concerning heredity, will think it necessary to keep up old notions concerning the "specific" nature of a very ordinary disease, simply because there is evidence to show that a tendency to such a disease is frequently transmitted from parent to offspring. A man may inherit from his ancestor a well- or an ill-developed brain, and similarly he may inherit a well- or an ill-developed lung. If he have an ill-developed brain, we should say that he inherited a predisposition to brain-disease, though the particular form which might appear would be altogether uncertain. Nobody doubts, however, that quasi-pathological accidents may determine in another individual, who inherits no such predisposition, similar forms of disease. The case is precisely the same with regard to lung-diseases. A man may inherit from his ancestors lungs which contain within themselves the elements of weakness—organs the tissues of which are so constituted, with relation to the whole organism, that the very slightest determining causes suffice to initiate a set of changes which terminate in one or other of the forms of pulmonary phthisis. And, similarly, just as brain-disease may be acquired in the life of an individual who inherits no predisposition, so, under the strong pressure of general and local causes, may any of the forms of phthisis manifest themselves in individuals who inherit no family predisposition to such a disease. Where is the difficulty? What occasion have we to resort to the use of the word "tubercle"? How does so much depend upon the use we make of it? I must confess myself unable to understand what Dr. Wilson Fox means when he says—"The etiology of phthisis, the therapeutics of phthisis, and the prognosis of phthisis, all hang upon this point—how far tubercle is concerned in the morbid anatomy of phthisis." To me it seems quite the reverse. I regard this question as one of a mere verbal nature, and as capable of being separated entirely from all problems as to the etiology, therapeutics, and prognosis of phthisis. Were it not for the very important nature of these questions under discussion—were it not for the fact that professional opinion in this country might be led into grooves which would subsequently, as I conceive, introduce a lamentable confusion into the science of medicine and pathology—I should not have ventured to speak at such length. What I have said, however, may be taken as the expression of views which I have arrived at slowly and deliberately, after the most earnest consideration of all the facts. I would say then, emphatically, if we accept the new signification which has of late been proposed for the word "tubercle," we involve ourselves in an endless series of disputes and differences of opinion as to the real nature and limits of such a growth as compared with many chronic inflammations, with syphilitic indurations, scrofulous products, leucocythæmic growths, the lymphomata of adénie, and other morbid products. Whilst, on

the other hand, if we throw away this indefinite and almost meaningless word "tubercle," we shall at the same time get rid of an entangled brushwood of conflicting opinions, and of a series of pitfalls which simply hinder our progress, and prevent that almost complete unanimity concerning the mere facts themselves which would otherwise prevail.

Dr. PAYNE said he wished to ask Dr. Fox if he would state in his reply whether this view of his general argument was correct, that cases of acute tuberculosis formed the pivot of his argument, and that the seventeen changes found in the lungs of children were due to acute tuberculosis, and that he regarded changes in chronic phthisis as due to suppuration. If this was the point of the argument, it was important to know in what sense acute tuberculosis is understood, and the kind of disease in the children whose lungs were examined. Then we had to consider the chronology of the products and the appearances met with. He must admit that the question was by no means simple, and even in the best marked cases it was difficult to decide the dates with accuracy. On examining the lungs of patients dying with phthisis, we find grey granulations or tubercles (Virchow), or what might be called by some other name (only it must have a name). We found tubercle in this sense, and inflammatory change. There were two views as to the sequence—either the tubercle was first, or the other change was first. To state briefly the results of such an inquiry, there would be cases where the tubercle was the first, and the inflammatory change secondary; or the inflammatory change might be the first, and the tubercle secondary. He thought this because there was one preparation, which he had brought there to-night, which showed an ordinary tubercle surrounding a vein, near it were air-cells with inflammatory changes; also other cells with catarrhal changes and hæmorrhage; also a bronchus, showing the results of inflammatory change. The tubercle itself showed no sign of degeneration, no sign of age; so here the inflammatory changes of the bronchus were anterior in time to the tubercle. In many cases like this we might say the inflammatory change from local affection was anterior to the production of tubercle, and the changes in the air-cells subsequent to the tubercle. From this evidence, that when the lung was full of tubercles, and in one part larger, yellower, and more opaque, there were the older, and then the larger were not true tubercles, but enlarged by inflammatory changes; hence, no doubt, tubercle was first here, and inflammatory change secondary. The two classes of cases were clear; if we asked how tubercle causes inflammation and inflammation tubercle, we had a large scope for argument. We must employ experiments, &c. That tubercle was produced by the influence of inflammation he thought had been established by pathological experiments—that inflammatory matter induces this change. There was no difficulty in supposing it acted as an influence, as in pyæmia, at times directly or through distant channels; thus a cavity in the lung would secrete pus, and this was absorbed and lung affected, and tubercle formed; or inflammatory matter from a distance conveyed to the lung, and miliary tubercles were found scattered through the lung. When tubercle was in a lung it acted (as Laennec said) as a mere mechanical agent, or from containing a septic agent; either was possible. When both tubercle and inflammatory changes were present, not the one produced by the other, but by some common cause, say some septic substance, in one part of the lung-tissue you meet with inflammatory change of a catarrhal kind, in another part tubercle. If it was said that early phthisis depended on inflammatory changes, then he thought we were open to the charge of speaking on insufficiency of knowledge; it was not certain that catarrhal diseases formed the beginning of phthisis; it was not associated with ordinary catarrhal diseases, but both were accompanied by hyperæmia, &c. The inflammation dependent on syphilis could not be distinguished from those simply produced; so it was by no means proved that there was not some septic substance which produced tubercle. He had one word to say as to the internal structure of tubercle: he could not agree with the statement that it was always adenoid tissue; sometimes it was like it, but not always. Tubercle was not often symmetrical, and its appearance depended much on the section.

Dr. DOUGLAS POWELL observed that the main question in debate was as to the restrictions to be applied to the terms tubercle and tuberculosis respectively. The facts brought forward by Dr. Fox, and illustrated by his specimens, drawings, and diagrams, were so faithfully and truly represented that they would be accepted and confirmed by the experience and observation of all who had most studied the subject. But these facts would naturally be regarded by different observers from different points of view, and different inferences would be drawn from them. Dr. Powell accepted Dr. Fox's definition of tubercle as most typically applying to the grey granulation, and as not essentially including the inflammatory changes with which the granulation was so often associated, and he would restrict the term "acute tuberculosis" to that acute disease all the local phenomena of which were occasioned by the definite anatomical element, tubercle. The striking pathological characteristics of acute (pulmonary) tuberculosis were that, usually a part of a general disease, its anatomical element, the grey granulation, was developed almost simultaneously throughout the lungs and any other organ that might be affected; there was found post mortem very little difference in date between the tubercles in different organs; that these granulations in the lung were in such typical cases unaccompanied by any pneumonia. On this point he, with great respect, slightly differed from Dr. Fox. He had often seen in the acute tuberculosis of adults the tubercle unaccompanied by any pneumonia, every portion of the lung floating freely in water, although there might be found on minute examination some epithelial shedding, such as is common to all active or passive congestions of the organ. Again, in this acute tuberculosis there was no breaking up of the lung tissue; there were no lung elements in the sputa; the patients did not die of lung obstruction as in the case of acute phthisis, but of the general disease and obstruction to respiration. On the contrary, he agreed with Dr. Fox that one of the striking characteristics of tubercle was its tendency to fibroid development. On these grounds he thought *acute tuberculosis*, as thus restricted, could not be admitted under the definition of phthisis at all, and that tubercle should not be regarded as the essential specific element in phthisis. Dr. Powell fully admitted the local development of tubercle, both in the granulation and diffused form, as frequently present in the lesions of subacute and chronic phthisis; but this local tubercle was always attended with inflammatory changes and breaking up of lung, and he could not regard the tubercle as the element primary or specific to these changes, nor speak of such cases as varieties of tuberculosis. Dr. Powell concluded by observing that he thought much of the inveteracy of phthisical lesions would be explained without the aid of any specific precedent deposit tubercle, if we remembered the peculiar construction of the lung as an intricate unfolding of a surface continuous with a mucous surface, and very analogous to it, but richer in lymphatics and bloodvessels. By a mere tussive expiration we could remove without danger or difficulty the products of a nasal or bronchial catarrh, but the products of an equally simple affection of the alveoli could not be so easily expelled; they accumulated, decayed, irritated the alveolar wall and set up those proliferative and inflammatory changes which constituted local tubercle—just as the retained secretion of a sebaceous follicle gave rise to the acne pustule; the thickened alveolar walls in their turn degenerated, softened, or suppurated, and in these changes, complex only with the complexness of the surface in which they occurred, we saw the rough but accurate outlines common to the many morbid pictures presented to us by the lungs of those dead of phthisis. Taking further into account the constant ceaseless movements of the lungs, and the free access of air to the diseased parts, and the mystery was to him that such lesions were not even more intractable and destructive.

The discussion was adjourned to the next meeting, when, the President stated, the discussion must be concluded, and if needful for that purpose the meeting would be prolonged beyond the usual time.

BEQUESTS, &C., TO MEDICAL CHARITIES.—The Directors of the Bank of England have voted £1000 towards the London Hospital Extension Fund. The Great Northern Hospital has received a fifth £1000 from "S. W. Y." Mr. William Merry, of Highlands, Wilts, bequeathed £3000 to the Royal Berks Hospital, payable on the death of his widow.

HÆMATOZOA.

To the Editor of THE LANCET.

SIR,—Allow me a short space to explain a portion of my paper on the canine filaria, which appears from the second paragraph of Dr. Cobbold's letter in your last issue to be misunderstood—viz., "the hæmatozoon in the dog being referred by me to the so-called Spiroptera sanguinis."

My intention was to show that the anatomical details of the worms sent by Dr. Lamprey negatived the idea of their being "spiropteræ," and justified me in classing them as "filariæ."

I also mentioned that the canine nematodes hitherto named spiropteræ did not appear to have been accurately determined as such, while their "recorded features" suggested the linking of them with Dr. Lamprey's specimens—*i. e.*, filariæ; and, considering the concordance in many details between the Netley Museum worms and those described by Gruby and Delafond, I noted the propriety of retaining their nomenclature at least as far as the genus was concerned.

Dr. Cobbold, however, has shown in his letter that the canine hæmatozoon has already received the name abroad of Filaria immitis, and the felicity of such a designation to embrace the main characters of the nematode cannot be questioned.

Correcting this error in Dr. Cobbold's complimentary letter,

I am, Sir, &c.,

FRANCIS H. WELCH, F.R.C.S.

Royal Victoria Hospital, Netley, March 29th, 1873.

BIRMINGHAM.

(From our own Correspondent.)

THE municipal authorities and the magistrates of the borough have come to a dead lock with regard to the appointment of a surgeon to the gaol. The late surgeon received £200 per annum, and that was quite little enough, considering the onerous and important duties he was called upon to perform; but when Dr. Hill resigned, the so-called economists in the Town Council carried a resolution reducing the salary to £100. The magistrates, with whom the election rests, declined to appoint anyone at so pitiful a remuneration, and requested a conference with the Town Council, when they pointed out how inadequate the proposed stipend was, and how much more was paid for similar services in even smaller gaols. Still, argument was of no effect; numbers prevailed, and again the Council has resolved that they will only give £100 a year for a gaol surgeon. It is to be hoped that the magistrates will not recede from the position they have taken, and that they will decline to act as the servants of the corporation.

Dr. Robinson, the vaccination officer, has had a successful year:—8052 births were registered during the twelve months, and of these 6702 had been successfully vaccinated; 714 died previous to vaccination, and only 52 cases could not be accounted for. Small-pox yet lingers in the district, and a few deaths have recently occurred from it. The death-rate is 24·4.

"Hospital Saturday" is still bearing fruits: the sum of £4000 which you noticed a fortnight ago, as the probable result of the collections in the manufactories and workshops, has already swelled to £4700, and the example set at Birmingham has already been followed at West Bromwich, and will shortly be introduced at Walsall in aid of the Cottage Hospital. The older source of income, the "Hospital Sunday," has again done good service at Wolverhampton, by the addition of £915 to the funds of the South Staffordshire Hospital.

The people of Dudley are complaining bitterly of the insufficient and costly nature of the water-supply of their town. As fever has so recently visited them, it is incumbent on the corporation to see that the inhabitants are supplied with an ample and pure supply of water, and also that they are not compelled to pay an extortionate price for it by the officers of an irresponsible water company.

At the recent annual meeting of the Midland Counties Middle-class Idiot Asylum, Dr. J. C. Bucknill, F.R.S., delivered an address on the usefulness of and necessity for such institutions, and made an earnest appeal for increased aid for this charity.

Supra-pubic lithotomy in children is rare, but a successful case of that operation is now in the Queen's Hospital: the patient is a little girl aged 3½, and the stone, which was of lithic acid, measured ¾ of an inch in diameter. Mr. Jordan operated ten days ago, and though the urine has since passed through the external wound, no peritonitis has taken place. Mr. Jolly lately performed resection of the ankle for caries in a young man aged 27, at the General Hospital, and the patient has done well.

At the last meeting of the Midland Medical Society, Mr. Gilbert Smith presented a specimen of fracture of the spine in the cervical region, and a hydrocephalic brain. Mr. West read notes of an ovariotomy in a lady, aged 32, which had terminated successfully. The case was complicated with pregnancy, the patient having been prematurely delivered of twins just two months prior to the operation. Dr. Savage exhibited a uterine fibroid, removed by lateral incision, and Dr. Pritchard Davies read a paper "On Meningeal Neuralgia."

Birmingham, March 31st, 1873.

Obituary.

J. S. WILKINSON, M.R.C.S.

THE late Mr. J. Sebastian Wilkinson received his professional education at St. Thomas's and Guy's Hospitals. He was an esteemed pupil of the late Sir Astley Cooper, and served the office of dresser to the late Mr. Chandler; later he assisted Mr. E. Granger as Demonstrator of Anatomy. He became a member of the Royal College of Surgeons in 1820; afterwards entered the Royal Navy, and was attached to the Royal Naval Hospital at Plymouth, under Sir Stephen Love Hammick, which appointment he resigned and returned to London, opening a private class in Dean-street, Borough, to teach anatomy, physiology, and surgery, in which he was distinguished for a very apt mode of conveying a ready insight and clear knowledge, and was very successful. The class was largely attended, and amongst his pupils was the late Dr. Hodgkin, and other distinguished men. Whilst holding these classes, the late Mr. R. Granger, who succeeded his brother at the Webb-street School of Anatomy, offered him the demonstratorship, which he accepted, and held for a short period, when the late Mr. Pilcher made terms with Mr. Granger for a partnership and superseded him. This led to much disappointment among the students, who met and offered to open a new school if Mr. Wilkinson would consent; this he declined on account of sincere friendship for the Grangers. He contributed several communications to THE LANCET, and was particularly distinguished to the last for his remarkable memory of anatomy, and power and facility of demonstration. Of late he had settled in the City, succeeding to the practice of an old pupil and friend.

HENRY EAMES, A.B., M.D., T.C.D.

IT is with regret that we record the death of this gentleman, which took place on the 24th March, at his residence at Upper Fitzwilliam-street, Dublin, from that scourge of our profession, typhus fever, at the early age of 31. The disease was of the most malignant form, and proved fatal after a short illness. The deceased was a Lecturer on Medicine in the Ledwich School of Medicine, Physician to Mercer's Hospital, and Honorary Secretary to the Medical Society of the College of Physicians. Possessed of an ample fortune, and gifted with abilities of a high order, he would unquestionably have obtained a foremost position in the profession in the city he resided in, had his life been spared. He was of a kind and genial disposition, and his loss is felt deeply by his medical brethren. Dr. Eames leaves a widow and three children to deplore his untimely end.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on March 27th:—

Hansell, William Charles, Taunton, Somerset.
Lindsay, William Vickress, Fulham-place, Paddington.
McDonnell, Michael Sweeny, Storrington, Sussex.

As Assistants in Compounding and Dispensing Medicines:—

Carrah, George Ingersoll, Falmouth.
Eagle, John, King's College Hospital.
Severs, Samuel Thomas, Ripon.
Stevens, Joseph, Stourbridge.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Frederick Hawes Elliott, University College Hospital; Charles Louis Webb, Guy's Hospital; John Payne Manningham, Queen's Hospital, Birmingham.

COLLEGE OF PHYSICIANS, IRELAND.—At a special meeting of this College held on March 27th, the following obtained the licences in Medicine and Midwifery:—

MEDICINE.—Wilmot John Jones; Wm. Robt. Kerans.
MIDWIFERY.—Robt. Gray; Wm. Robt. Kerans.

H.R.H. the Duke of Edinburgh will preside at the fifty-ninth anniversary festival of the Hospital for Diseases of the Chest, City-road, to be held at the City Terminus Hotel, Cannon-street, on Monday, May 19th next.

MR. J. L. BREE, of Washington Hall, Durham, has just given a handsome present of £60 worth of beautiful oleographs to the Newcastle-on-Tyne Infirmary.

LONDON INTERNATIONAL EXHIBITION, 1873.—A meeting of the Committee on Scientific Inventions and New Discoveries was held in the Royal Albert Hall on Wednesday, the 26th ult. The following members were present:—Mr. C. B. Vignoles, F.R.S.; Mr. F. A. Abel, F.R.S.; Capt. Hans Busk; Capt. Colomb, R.N.; Major E. F. Ducane, C.B., R.E.; Prof. E. Frankland, D.C.L., F.R.S.; Prof. T. M. Goodeve, M.A.; Mr. J. Norman Lockyer, F.R.S.; Dr. D. S. Price; Mr. J. Ramsbottom; Mr. T. Sopwith, M.A., F.R.S.; Lieut.-Col. Strange, F.R.S.; and Sir C. Wheatstone, D.C.L., F.R.S. The committee inspected the various objects which have been delivered for exhibition.

THE CITY OF LONDON LUNATIC ASYLUM.—The annual report of this institution has lately been issued. On the 1st of January, 1872, there were 275 patients in the asylum—116 males and 159 females, and during the year 21 men and 23 women were admitted, making together 319. Of these 35 were discharged or removed, and 284 remained in the institution. The general health of the patients had been good, only 18 deaths out of a mean average of 283 having occurred during the year, of which the causes were as follows:—General paralysis, 1, epilepsy 4, pleuro-pneumonia 3, pneumonia 1, disease of the heart 1, accidental suffocation in the course of epileptic seizure 2, and fracture of the spine 1.

Medical Appointments.

BLAND, G., L.R.C.P.L., M.R.C.S.E., has been appointed an Honorary Surgeon to the Macclesfield Infirmary and Dispensary.

BLAND, J., M.R.C.S.E., J.P., Senior Honorary Surgeon to the Macclesfield Dispensary, has been appointed Consulting Surgeon to the Macclesfield Infirmary and Dispensary.

BOURNE, C., L.K.Q.C.P.I., has been appointed Medical Officer for the Eastern District of the Godstone Union.

BUCKLEY, S., M.B., M.R.C.S.E., has been appointed Medical Officer of Health for the Prestwich Rural Sanitary District: £12 per annum.

CARTER, A. E., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer of Health for the Tooteth-park Urban Sanitary District: £25 per annum.

COX, R. W., F.R.C.S.E., has been reappointed a Surgeon to the General Hospital, Bristol, on the expiration of his second term of ten years.

COUPLAND, A. N., M.R.C.S.E., has been appointed Medical Officer for the Nuneaton District of the Nuneaton Union, vice Robinson, resigned.

COWLEY, J. S., M.R.C.S.E., has been appointed Medical Officer for District No. 5 of the Uxbridge Union.

DAVENPORT, C., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of Health for the Bromsgrove Country and Bromsgrove Town Urban Sanitary Districts combined: £60 per annum.

FENTEM, P. S., M.D., has been appointed Medical Officer of Health for the Urban and Rural District of the Northern Division of the Bakewell Union: £75 per annum.

FRAPPS, J. J., M.R.C.S.E., has been appointed Medical Officer to the new Workhouse and Infirmary of the Clitheroe Union, Lancashire.

GIBSON, W. G., M.D., has been appointed Medical Officer of Health for the Witham Rural Sanitary District: £150 per annum.

HART, E. J., M.R.C.S.E., has been appointed Medical Officer for the new District No. 4 of the Brighton and Hove Provident Dispensary.

HART, W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for District No. 4 of the Chelmsford Union, vice Hare, deceased.

HICKINBOTHAM, J., M.D., has been appointed Medical Officer of Health for the Acton Rural Sanitary District: £150 per annum.

HUDSON, R., M.R.C.S.E., has been appointed Medical Officer for the Kilmington District of the Axminster Union, vice Bilery, resigned.

HODGSON, W. J., M.D., has been appointed Medical Officer for the Castleton District and the Workhouse of the Rochdale Union, vice Lawton, resigned.

HOLMES, Mr. T. M., has been appointed Lecturer on Botany at the Westminster Hospital Medical School, vice Bennet, resigned.

JORDAN, F., F.R.C.S.E., has been appointed an Honorary Consulting Surgeon to the West Bromwich District Hospital.

KNAPP, G. F. A., M.R.C.S.E., has been appointed Surgeon to the "Sir John Moore" Lodge of Odd Fellows, Manchester Unity, Worcester, vice Griffiths, deceased.

KNOX, J., M.B., M.D., has been appointed Medical Officer of Health for the Urban and Rural District of the Southern Division of the Bakewell Union: £75 per annum.

LETHEBY, Dr. H., has been appointed Joint Public Analyst for the County of Essex.

M'ENTEE, W. C., L.A.H.Dub., L.M., has been appointed Resident Medical Officer to the No. 4 or Grand Canal-street Dispensary, South Dublin Union, vice Shea, deceased.

MARSHALL, L. W., M.B., M.R.C.S.E., has been appointed Resident Surgeon-Apothecary to the General Hospital, Nottingham, vice Elder, resigned.

MAWSON, W. A., M.R.C.S.E., has been appointed Senior Resident Medical Officer to the York Dispensary, vice Petch, resigned.

MAY, H., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer of Health for the Dresden Urban Sanitary District: £10 per annum.

MEGGET, A., M.R.C.S.E., has been appointed Medical Officer of Health for the Scarborough Rural Sanitary District: £60 per annum.

NICHOLLS, W. H., M.R.C.S.E., has been appointed Medical Officer for the new District No. 3 of the Brighton and Hove Provident Dispensary.

NORRIS, H. L., jun., M.B., C.M., L.R.C.S.Ed. (late Resident Surgeon, Royal Infirmary, Edinburgh), has been appointed House-Surgeon to the County and City Infirmary, Perth, vice R. Sinclair, M.B., resigned.

O'FARRELL, N. S., M.B., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Arthurstown Division of the Fethard Dispensary District of the New Ross Union, vice Long, deceased.

PEARCE, F. M., M.D., L.R.C.P.L., has been appointed Certifying Factory Surgeon to the Chorlton-on-Medlock District, Manchester, vice W. Heath, M.R.C.S.E., resigned.

SHEA, J., M.D., B.A., M.R.C.S., has been appointed Medical Officer of Health for the Reading Urban Sanitary District: £300 per annum. Also Public Analyst, at an additional salary.

SPURGIN, W. H., M.R.C.S.E., has been appointed a Resident Medical Officer to the York Dispensary, vice Mawson, promoted.

STEVENS, R. S. J., M.D., has been appointed Medical Officer of Health for the Bournemouth Urban, and Christchurch and Ringwood Rural, Sanitary Districts, combined: £235 per annum.

STEVENSON, T., M.D., has been appointed Public Analyst for the County of Surrey.

TAIT, L., F.R.C.S.E., has been appointed an Honorary Consulting Surgeon to the West Bromwich District Hospital.

TIDY, Dr. C. M., has been appointed Joint Public Analyst for the County of Essex.

TIZARD, H., M.D., has been appointed Medical Officer of Health for the Weymouth Urban Sanitary District: £40 per annum.

WAUGH, G., M.B., C.M., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for District No. 4 of the Brackley Union, Northamptonshire, vice Gaitskell, resigned.

WESLEY, J. S., M.B., M.R.C.S.E., has been appointed Medical Officer of Health for the Wetherby Rural Sanitary District: £120 per annum.

WHITE, E., jun., M.D., has been appointed House-Surgeon to the Royal Maternity Hospital, Edinburgh, vice Stevenson, whose term of office has expired.

WILLIAMS, J., M.D., has been appointed Medical Officer for Out-patients, Queen Charlotte's Lying-in Hospital, Marylebone-road, vice Grigg, appointed Medical Officer for In-patients.

Births, Marriages, and Deaths.

BIRTHS.

EWART.—On the 28th ult., at Limefield House, Cheetham-hill, Manchester, the wife of J. H. Ewart, M.R.C.S.E., L.R.C.P.L., prematurely of a son, still-born.

FURNIVALL.—On the 29th ult., at East Dereham, Norfolk, the wife of H. W. Furnivall, M.R.C.S.E., of a daughter.

GORDON.—On the 25th ult., at Kingsove, Salisbury, the wife of Dr. J. H. Gordon, of a son.

TOWNSEND.—On the 29th ult., at St. Leonard's Villas, Maida-hill, the wife of Surgeon-Major S. C. Townsend, of a daughter.

MARRIAGES.

DAVIS—CARLESS.—On the 18th ult., at St. Matthew's, Calnecross, Glos., Frederick Henry Alexander Davis, eldest son of the Rev. Chas. Henry Davis, M.A., of Calnecross, to Jessie Anna Carless, second daughter of John Carless, M.D., of Stratford Lodge, Stroud, Gloucestershire.

HARDWICKE—ALLEN.—On the 27th ult., at the Parish Church, Greasbro, Herbert Junius Hardwicke, Surgeon, third son of Dr. Hardwicke, of Rotherham, to Mary Elizabeth, only daughter of the late Wm. Allen, Esq., of Wink House, Doncaster.

HOPE—MURRAY.—On the 25th ult., at the Manse, Balmaclellan, James Johnstone Hyslop Hope, M.D., of West Calder, to Margaret Hope, eldest daughter of the Rev. Geo. Murray, of Traquhain, Minister of Balmaclellan.

MAXWELL—DATTON.—On the 20th of Feb., at Christ Church, Georgetown, Demerara, Peter Benson Maxwell, Stipendiary Magistrate, eldest son of Sir Peter Benson Maxwell, to Kate Julia, second daughter of Dr. Datton, of Demerara.—No Cards.

PRATT—OSBURNE.—On the 2nd inst., at All Saints' Church, Clapham-park, John Wyatt Pratt, M.R.C.S.E., of Wivelliscombe, Somerset, to Jane Eliza, youngest daughter of Geo. Osburne, Esq., of Portland, Victoria, Australia.

DEATHS.

BARTLETT.—On the 31st ult., at Ladbroke Lodge, Notting-hill, William Bartlett, F.R.C.S.E., aged 65.

BROWN.—On the 24th ult., G. Gilbert Brown, M.D., of Don Account-entrance, Aberdeen, late Inspector-General of Hospitals, aged 73.

BYERS.—On the 24th ult., R. H. Byers, M.R.C.S.E., of Hamilton-terrace, Milford.

GOULD.—On the 16th ult., on the passage from Aden to Suez, F. Gould, M.D., of Charlotte-street, Bedford-square, aged 33.

MARTIN.—On the 23rd ult., at Nice, John Martin, M.D., L.D.S., &c., of Cambridge House, Portsmouth, Keydell, near Horndean, Hants, and of Mentone, Les Alpes Maritimes.

MATTHEWS.—On the 27th ult., at Norton, Suffolk, Benj. Fielding Matthews, M.R.C.S.E., aged 51.

Medical Diary of the Week.

Monday, April 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Mr. Maunder, "On two Cases of Dislocation and Fracture of Head of Humerus."—Mr. Gant, "On three Cases of Double Amputation of Limbs (two patients shown).—Dr. Fayrer, "On European Child-life in India."

Tuesday, April 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8 P.M. Ballot.—8½ P.M. Dr. Symes Thompson, "On the Elevated Health Resorts of the Southern Hemisphere, with special reference to South Africa."—Dr. Elam, "On some Results of Treatment in Affections of the Nervous System."

Wednesday, April 9.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
EPIDEMIOLOGICAL SOCIETY.—8 P.M. Mr. J. N. Radcliffe, "On the late Outbreak of Plague in Persia."

Thursday, April 10.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, April 11.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, April 12.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

CEREBRAL INJURY *versus* DRUNKENNESS.

WE have adverted on more than one occasion lately to the mistakes committed by the police in confounding cerebral injury with intoxication. A similar mistake, which occurred at a hospital, took place in Dublin last week, in which a quay porter, whilst loading a steamer, fell on his head into the hold of the vessel, violently striking a large cask that was below. The patient was at once conveyed to Jervis-street Hospital, and, according to the statement of the police, was examined and refused admission by the officials of that institution as being drunk. He was then taken home in a cab, but got so bad, becoming insensible and speechless, that he was removed next morning to another hospital, where he died the following day. A post-mortem examination showed that death had resulted from fracture of the skull, with an effusion of blood beneath the anterior part of the base of the skull. The jury, at the coroner's inquest which was held, returned a verdict of "Accidental death," and expressed their regret that more care was not exercised by the officials of Jervis-street Hospital in discriminating between drunkenness and a fracture of the skull.

Physician.—We do not clearly understand what our correspondent means by Benefit Societies of a higher class than those he mentions. In the present LANCET, and in almost every recent number, he will find allusions to some kind of Benefit Societies.

Mr. F. H. Anderson.—Manufacturers, John Watts and Co., 6, Broad-weir Bristol.

MEDICINE AT LEIPSIC.

LÉON GAUTIER says: "In the Universities lie Germany's strength and the secret of her success." In 1870 Leipzig alone sent out to the war 400 of her 1668 students, of whom 55 never returned. Before their departure the Professors addressed them in the Town Hall, one saying: "If the French ask you where you come from, say 'From Leipzig.' They will remember the name." The Medical Faculty, formerly third in importance after Jurisprudence and Theology, is now rapidly coming to the front—the present session numbering nearly 400 medical students, besides 121 studying Pharmacy. The senior of the Faculty, as he is of the whole University, is Dr. Ernst Heinrich Weber, Professor of Anatomy, who has held his Chair for fifty-two years. There are also Dr. Radius, Professor of Hygiene; Dr. Wunderlich, ex-Rector and Clinical Professor; Dr. Credé, Professor of Midwifery; and Dr. Wagner, Professor of Pathology and Pathological Anatomy; while Physiology is represented by Dr. Ludwig; Surgery by Dr. Thiersch; Ophthalmology by Dr. Coccius; Anatomy by Dr. His; and Topographical Anatomy by Dr. Braune. Our readers have, doubtless, recognised many of these names as of European reputation—to say nothing of Dr. Czermak, a man of large private fortune, who lectures on Physiology, and has provided in his own residence a commodious lecture-room and laboratory, with teaching apparatus of every kind; the whole (lectures and practical arrangements) being free and open to all. There are also fourteen extraordinary Professors and twelve privat-Docents in the Medical Faculty of Leipzig, which, moreover, enjoys clinical resources of the best kind. In the suburbs there is the new large Infirmary, built on the latest and most approved principles; and in connexion with it is the Clinical Institute, of which Professor Wunderlich is Director and first teacher; and Professor Thiersch, Director of Surgical Clinics. The Infirmary is a one-story building, spread out in pavilions over an extensive area. In addition to it are the Pathologico-Anatomical Institute, under Professor Wagner; the Physiological Institute, under Professor Ludwig; and the Pathologico-Chemical Laboratory, under the Clinical Director, Professor Hofmann. A large new Anatomical Institute, towards which the Saxon Chamber a year ago granted 167,000 thalers, is in course of construction; and in another part of the town there is a Hospital for Midwifery and Women's Diseases, under Professor Credé. Professors His and Braune are Directors of an Anatomical Institute in conjunction with the old University buildings; while Professor Radius superintends a Pharmaceutical Museum, Professor Wagner a Medical Polyclinical Institute, Professor Schmidt a Surgical Polyclinical Institute, and Professor Thomas a District Polyclinical Institute. In an opposite part of the town there is an Institution for Eye Diseases, under Professor Coccius. Leipzig, the medical student will observe, is well worth a visit; while residence there is much cheaper and, in a sanitary point of view, safer than at Vienna or Berlin.

Mr. G. G. Jarvis.—We regret that want of space will not permit us to entertain our correspondent's proposal.

ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—You have consistently advocated the adoption of a general staff for us army doctors, as opposed to the mixed system of regimental and staff. I have no quarrel with you on that score; for, spite of my predilections for the one, and the slowness of my conversion to the other, I still am a convert, and have come to regard your view as the right one. So far, then, I am not opposed to the spirit of the late reforms; but these reforms are accompanied by many changes which would almost seem as if they had been introduced to create distrust and opposition. There is the question of forage. I should like to know whether rank or necessity regulates the allowance in this respect to the Commander-in-Chief, for example? Mr. Cardwell is said to be in favour of diminishing the effective, and dead against increasing the ineffective, list of doctors. Very good. Only let him apply the same rule to the other branches of the service. Notions of economy can scarcely have been the grounds of his action, or he would never have left a military Governor at Netley, and the mention of that place causes me to ask the meaning of the new "regulation in connexion with hospitals." Is all the power to be conferred upon the Governor at a general hospital, while the medical service is to be saddled with the responsibility without any contingent to cover possible losses? By the way, these regulations are framed in the teeth of the principle affirmed by Lord Herbert's Commission. It was always thought, too, that existing interests would be considered. The translation of gentlemen engaged in the duties connected with apothecaries' stores to those of officering the new corps is another point. I have only touched on a few subjects; but they will serve as a sample. They will, at any rate, show why the new regulations, spite of several excellent principles embodied in them, are so unpalatable. It will be the fault of the Government if they prove a failure instead of the reverse.

Yours obediently,

March 25th, 1873. AN OLD ARMY DOCTOR.

*** The length of our reports of the Medical Societies this week compels us to defer the insertion of an article on the new regulations.—ED. L.

A Constant Reader.—The 89th and 90th sections of the Passengers Act, 1863, enjoins that the surgeons of all passenger ships must be duly qualified medical practitioners, registered under the Medical Act of 1858. All vessels must be provided with such an officer if the voyage exceeds 80 days for a sailing vessel, and 45 for a steamship, with more than 50 *passengers* on board; and also in all cases, whatever may be the duration of the voyage, when the number of persons on board (including cabin passengers, officers, and crew) exceeds 300.

Victoria.—We believe so; but our correspondent should inquire of the particular body whose diploma he wishes for.

EPIDEMIC HOSPITAL AT ABERDEEN.

DR. J. W. F. SMITH, Senior Physician to the Aberdeen Royal Infirmary, has recently called attention to the existing hospital accommodation for patients suffering from infectious fevers, and pointed out how utterly inadequate it is to meet the requirements of a large and increasing city like that of Aberdeen. This subject is by no means a new one, and it is to us a matter of surprise that it has not been remedied long ago. In 1867 the medical officers of the infirmary addressed a communication to the President and Managers of that institution, and a Report was laid before the City Parochial Board in the preceding year by its medical officers, in conjunction with Drs. Ogston and Beveridge, in both of which the urgent nature of the requirement was dwelt upon. Epidemic and contagious diseases are to a greater or less extent constantly present, and when the number rises beyond a certain very limited amount there is really no proper or adequate provision for them. For a short time in 1868 reasonable hopes were entertained that a Fever Hospital would soon be erected; plans for a suitable building were then submitted by the architect, but the project came to nothing. We find Dr. J. W. F. Smith in the present year still pressing the same subject on public attention. There cannot be a doubt that the practice of mixing different forms of infectious and contagious diseases together is attended with great risk, besides being a source of manifest injustice to the patients themselves. The appropriation of any portion of the ordinary medical wards of an infirmary for cases of infectious fever, besides interfering with the normal arrangements of the hospital, is, of course, open to the gravest objections. At the present time the total fever accommodation afforded by the Royal Infirmary amounts to 54 beds, and provision is only made for the treatment of two forms of contagious disorder. Dr. Smith urges the Managers of the infirmary to intimate officially that they will not receive more than 50 cases of contagious disease, and that the local authority must be prepared to accommodate any excess of cases over that number. As the local authority is not only empowered but specially enjoined by the Public Health Act to protect the community from the evil influences of epidemic disease, it is unquestionably the legitimate body for making adequate provision for that purpose.

Mr. J. D. H., (Glasgow.)—We cannot forward private answers, and we must decline expressing any opinion as to the professional status of individual members of the profession.

THE PNEUMATIC ASPIRATOR.

To the Editor of THE LANCET.

SIR,—The increasing popularity of the pneumatic aspirator as a means of evacuating abscesses is my excuse for directing attention to a source of misadventure in its employment which I have not seen already referred to. I allude to the abstraction of blood which may occur in very undesirable quantity when the cavity is empty or but partially filled with fluid.

I was asked the other day by a professional friend to empty with this instrument a large acute abscess pointing in the upper part of the thigh of a feeble old lady, about seventy years of age, and communicating with the cavity of the pelvis. Having introduced the instrument, we three times exhausted the barrel, and each time got it filled with thick yellow pus. In the last of these tappings the pus was slightly tinged with blood. Anxious to empty the cavity entirely, we again exhausted the vacuum, and filled the aspirator from the abscess; but on turning out the contents into a bowl, it was discovered to be almost pure arterial blood, which firmly clotted. In fact, the great power of the instrument had either caused rupture of some vessels of the pyogenic membrane, from which it freely drew blood, or it may have drawn blood from punctures and scratches of that membrane already made by the point of the needle. In either case the cavity was very effectually cupped. I am glad to say the loss of blood, though serious, appeared to do no great harm; and having since freely opened the abscess with antiseptic precautions, it is rapidly recovering under antiseptic dressings.

In another large abscess which I evacuated, I was often much struck with the bloody admixture in the fluid I removed.

In a most interesting article on the Cure of a Case of Empyema, under the care of Dr. Russell in the City of Glasgow Fever Hospital (published by Mr. Lilly, the resident medical officer, in the *Glasgow Medical Journal* of November last), the same thing is illustrated. Even after the third tapping there seems to have been more or less blood mixed with the discharge obtained, and on one occasion what appeared to be pure blood was abstracted. Of this particular tapping the reporter remarks: "Needle evidently entered lung." This, however, I think, admits of doubt.

I have heard of one case of hydrocele treated by the aspirator, and in this case there was very considerable bloody admixture in the fluid withdrawn. I cannot help thinking the instrument a most unsuitable one for the treatment of this disease; and, if its use for this purpose become frequent, I venture to predict that cases of hæmatocele will not be such strangers in surgical practice as they now happily are.

I am, Sir, yours, &c.,

Glasgow, March 25th, 1873. HECTOR C. CAMERON.

THE DRUITT TESTIMONIAL FUND.

MR. HAYNES WALTON, the Treasurer, begs to acknowledge the receipt of the following contributions to the above Fund since February 14th:—

	£	s.	d.		£	s.	d.
Dr. Lucy Sewell, America	5	0	0	Mr. Lynch	2	0	0
Mr. Frederick Mayhew	3	3	0	Dr. Walter Bryant	1	1	0
Dr. C. B. Suckling, Birmingham	3	3	0	Dr. Jno. Mann	1	1	0
Dr. Little	2	2	0	Dr. Alexander Silver	1	1	0
Dr. G. Carter, Deal	2	2	0	Dr. Morris Tonge, Harrow	1	1	0
Dr. Greene, Bristol	2	2	0	Mr. H. J. Foulds, Derby	1	1	0
Dr. J. Sappen	2	2	0	Mr. W. Taylor	1	1	0
Dr. J. Sutherland, Norwood	2	0	0	Dr. Kidd, India	1	0	0

This is the last announcement.

USE OF THE TITLE "SURGEON" BY A LICENTIATE OF THE COLLEGE OF PHYSICIANS, LONDON.

Is this legal? asks an embarrassed correspondent. He has been told by the College of Surgeons that the use of the title on the strength of the licence of the College of Physicians would be followed by a prosecution. The College in Pall-mall, with consummate prudence, referred the anxious inquirer to his solicitor, though, by the way, it is not common for men just taking their qualifications to have a solicitor to consult. We have no special learning or authority on the subject; but it appears obvious that if the licence of the College of Physicians is a qualification in Surgery, the holder of it must be a surgeon.

S. P. should base his studies upon the "Duties" of a Medical Officer of Health, as set forth in the Order of the Local Government Board on the subject; use Parkes's Practical Hygiene (Churchill), Glen's Public Health and Local Government Laws, and Public Health Act, 1872 (Knight), and as many of the Annual Reports of the Medical Officer of the Privy Council (Blue-books) as our correspondent can obtain, as text-books; study well the different Returns and Reports of the Registrar-General, to get a notion of mortality returns, and the uses to which they can be put. He should familiarise himself with the microscope in its hygienic applications, and work for some time in a laboratory at chemical analysis, likewise with reference to hygienic matters; also study the Adulteration of Food and Drugs Act. Finally, he should make the opportunity, if possible, of studying the actual work of a medical officer of health in a town where an efficient officer has been for some time acting, and the arrangements for his work are thoroughly organised.

THE LATE DISCUSSION ON THE "INJECTION OF PERCHLORIDE OF IRON IN FLOODING" AT THE OBSTETRICAL SOCIETY.

To the Editor of THE LANCET.

SIR,—As an original employer and advocate of the injection of perchloride of iron in post-partum hæmorrhage, may I crave space for a few remarks on the late discussion thereon at the Obstetrical Society?

So far as I can form an opinion, Dr. Heywood Smith's case differs materially from the class of accidents in which the use of the above remedy is recommended by Dr. Robert Barnes in his excellent work on Obstetric Operations, or by myself.

From a tolerable experience of the use of the perchloride, now extending over thirteen years, perhaps I may be allowed to add my unqualified testimony to its value; for I believe, notwithstanding all objections, that in cases of simple perilous flooding from non-contraction of the womb after delivery, we have no mode of treatment approaching it in efficacy, if used with proper precautions; and I am certain that no one who has once had recourse to it can ever doubt its power in promoting *direct uterine contraction*.

Like Dr. Smith, I have treated with this remedy a case of secondary hæmorrhage arising from retention of a small portion of placenta, in which death resulted eight weeks after delivery apparently from some form of toxæmia; but in this instance there was manifest syphilitic taint, and it is hard to say, in the absence of a post-mortem examination, what state of matters, causative or otherwise, accompanied the fatal issue.

Further experience is undoubtedly needed to appreciate this remedy at its correct value, and also to determine in what cases other than the above its use may be appropriate. Pending this, such discussions as that provoked by the reading of Dr. Smith's paper must be useful by directing us to a knowledge of the truth, and I think the thanks of the profession are due to that gentleman for making public his case, unsuccessful though it proved. At the same time I wish to record my opinion that his failure does not at all detract from the value of the remedy in the cases I have indicated.

I am, Sir, yours, &c.,

March, 1873. HUGH NORRIS.

THE FUND FOR MRS. DAY.

£70 are now required to complete a sum of £1000, and the Executive Committee have issued an appeal to the profession for the money, which we hope will soon be forthcoming. Subscriptions to be sent to the Hon. Treasurer, Dr. Paul, Camberwell House, Camberwell; or Dr. Leonard Sedgwick, 2, Gloucester-terrace, Hyde-park.

RETIREMENT OF MEDICAL OFFICERS IN THE ARMY AND NAVY.

To the Editor of THE LANCET.

SIR,—I trust you will pardon me occupying your space with a few lines, in order to ventilate an injustice to naval medical officers, with the result, I hope, of enlisting your support.

I would wish to know why surgeons in the army, with twenty years' service, can retire on 16s. 6d. per diem at, say, forty-two years of age; whilst their unfortunate brethren in the navy, as staff surgeons with twenty years' service, cannot retire *until they are fifty-five*—in other words, *thirteen years later*. Surely this is a gross injustice, more especially when it is considered that a naval medical officer is compelled to lose at least four years on half-pay before he can serve his twenty years; not to speak of the far greater discomforts incidental to sea service; and the fact that army surgeons receive considerable increase of pay in India and China, whereas a naval man gets precisely the same pay at Calcutta and Portsmouth.

There is no doubt that the army and navy medical services ought to be treated equally well, and placed on a similar footing as regards pay and retirement; and as junior naval surgeons are at the present time nearly two years on half-pay before they can hope to obtain employment, it is exceedingly desirable that naval medical officers should be permitted to retire after twenty years' service on the same sum as army surgeons with similar service. If this permission were granted, it is needless to observe that promotion would be much more rapid, and long periods of compulsory half-pay almost unknown.

The various improvements in the naval medical service which have been effected by our present Director-General lead me to regard as certain his energetic and able interference at all times in the behalf of those officers over whom he presides.

Your obedient servant,

March, 1873. SURGEON, R.N.

CHARGE FOR CHILDREN IN CLUBS.

Far North.—It is customary to charge less for children in Clubs than for adults. The justice of the principle is open to question, for children are much more certain than adults to require attendance. We can only give a few instances of the charges of similar Societies. In Northampton the charge is twopence per week for a man and wife and all children under fourteen years; in Coventry, one penny per week is charged for every free member over twelve years, and one halfpenny for every member under that age. In some, the charge for children is even lower—viz., one shilling a year. It is monstrous to think that the medical attendance required by an average child can be remunerated on such a scale.

J. C. L.—56, Wood-street, Cheapside.

THE TREATMENT OF DRUNKARDS.

To the Editor of THE LANCET.

SIR,—The appeal of your correspondent, "Z.," in THE LANCET of last week appears to be a reasonable one. Therefore, having had some considerable experience in the medical treatment of persons who have indulged in the excessive use of stimulants, I have pleasure, for one, in giving a case as he requests.

I may premise that one result of my experience has been to establish the conviction of the utter futility of mere moral management—the panacea of those who are unable to comprehend that drunkenness can be other than vice. I by no means wish to be understood as asserting that drunkenness is not sometimes simply a vicious habit; but I am quite satisfied—and for the honour of human nature I am thankful that it should be so—that in a very large proportion of cases the habit is wholly free from the taint of vice; it is disease, and the sooner its treatment is transferred from the vice doctors to the physician the better. The medicine upon which I am disposed to place most reliance is iron; but it must be given in large doses, and, of course, the use of stimulants must be wholly discontinued.

A gentleman holding a valuable civil appointment in India had acquired the habit of drinking to excess, and the loss of his appointment appeared imminent. In the hope of preventing this, leave of absence for two years was obtained for him, and he came to England. Eighteen months of this leave had expired, and he was still a drunkard—not for want of advice, but it was advice that he could not follow. His sufferings were real, and stimulants for the time relieved them. At this period he came under my care (July 29th, 1868). He had had several attacks of delirium tremens, and, according to his own account, had contemplated suicide; he scarcely ever got a night of natural sleep, and scarcely knew what it was to eat at breakfast. The first night I gave him one drachm of the tincture of the sesquichloride of iron when he went to bed (which, doubtless, to some persons would seem to be an odd sort of composing draught). I saw him as soon as he was out of bed next morning, and he told me that he had not had such a night's rest for months; but he added that he was beginning to feel depressed. The dose was at once repeated. He dressed and came down to breakfast, to which meal, much to his own astonishment, he did full justice. For a short time he took one drachm of the tincture three times a day; then it was reduced to forty minims, subsequently to half a drachm, and then to twice a day. He dined at my table. Wine was always within his sight; but he said that he felt no craving for it whatever. He continued with me for about three months, when he returned to India perfectly well.

I am, Sir, your obedient servant,

Sunbury, March 31st, 1873. JOSEPH SEATON, M.D.

W. M. O.—Medical officers of health whose salaries are not paid in part by the Local Government Board are entirely under the local authorities appointing them, and these authorities regulate their duties according to their own will. No doubt the duties set forth by the Local Government Board will form the chief guide to such authorities. Inspectors of the Local Government Board have special powers of inspection within the districts of local boards and rural sanitary authorities; and the Local Government Board may cause inquiries to be made in relation to any matter concerning the public health in any place or places. Improvement Commissioners, we take it, will be pretty much left to themselves, at least for the present.

AN APPEAL.

WE strongly recommend the following deserving case to the consideration of our readers. The appeal appeared some few weeks ago in the pages of the *Daily Telegraph*, with the result of producing only £37 odd:—

"A young medical man (M.R.C.S. Eng.), of much promise, has become mentally afflicted by overwork and study combined, while discharging the important and anxious duties of house-surgeon at King's College Hospital in 1866, having previously obtained much distinction in successive competitions with his fellow-students in the medical department of King's College, London. He is now so far recovered that he is medically recommended to go to one of the colonies, and to occupy himself in agricultural pursuits as the best means for the complete restoration of his health. As the pecuniary resources of his relatives have been entirely exhausted by his long illness, they are induced to make an earnest appeal for help to the sympathy of the public as the only means by which they will be able to carry out the plan suggested by his medical advisers. If the readers of the *Telegraph* and other sympathisers will benevolently contribute 5*s.* or 2*s.* 6*d.* each, and will forward the same in the form of postage stamps to Chaloner W. Chute, Esq., Barrister-at-Law, 23, Old-square, Lincoln's-inn, it is hoped that the sum of £250 which will be required to carry out the plan proposed may be raised by these small contributions.

"We, the undersigned, can testify from our personal knowledge to the accuracy of the above statement, and we desire to recommend this distressing case to the favourable consideration of the public.

(Signed)

"WM. FERGUSSON, 18, George-street, Hanover-square.
"RICHARD PARTRIDGE, 18, Wimpole-street, Cavendish-square.
"GEORGE JOHNSON, M.D., 11, Savile-row.
"ROBERT BENTLEY, F.L.S., 91, Alexandra-road, South Hampstead.
"C. H. PLUMPTRE, M.A., Rector of Pluckley, late Chaplain of King's College."

LEGAL AND MEDICAL REMUNERATION.

AN ingenious person has addressed a letter to the *Bradford Daily Telegraph*, in which he expresses wonder that the medical profession should be so much worse paid than the legal. At Bradford a medical officer of health has just been appointed, at a salary of £500 per annum, while the town clerk receives £1800. At Halifax the salaries are £100 and £1000 respectively. The writer thinks there is something wrong in this difference, and we cordially agree with him. He truly asserts that it costs more money to make a doctor than a lawyer, and that his work is more valuable and more important.

Medicus.—We believe it can be obtained at several of the wholesale druggists.

Graduate.—Certainly not.

T. T.—Our correspondent ought, we think, to be the best judge. We cannot tell whether the gentleman merits generosity on the part of his employer or strict justice only.

SALARIES OF GAOL SURGEONS.

To the Editor of THE LANCET.

SIR,—At page 428 of THE LANCET for March 22nd, I see it is stated that the surgeon to Lancaster Castle receives £200 per annum. This is a mistake. Until the beginning of last year my salary was only £80. In January, 1872, it was raised to £100, and I believe I am still the worst paid gaol surgeon in England.

Your obedient servant,

J. P. LANGSHAW,

Lancaster, March 27th, 1873. Surgeon to Lancaster Castle.

*** The figures to which our correspondent refers were taken from a Birmingham daily paper.—ED. L.

ERRATUM: DR. MEAD AND MR. TAYLERSON.

AN unintelligible sentence occurs at the end of our reference to this subject last week, the result of a printer's error. We are made to say that we regret that Dr. Mead should have appeared as the accuser of Mr. Taylerson, and that Mr. Taylerson gave a very good account of his action in the case. The sentence should have read: We are still of opinion that Dr. Mead should not have appeared as the accuser of Mr. Taylerson, and that Mr. Taylerson gave a very good account of his behaviour in the case.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir James Paget, London; Sir Henry Thompson, London; Mr. Haynes Walton, London; Dr. Radcliffe, London; Dr. Morell Mackenzie, London; Dr. Buzzard, London; Mr. Smith, Brighton; Mr. Frisbee, Buxton; Mr. Wright, Glastonbury; Mr. Kendrick, St. Ives; Mr. Cooke, London; Mr. Wootton, Charlton; Mr. Baker, Oakham; Mr. Jones, Boston; Mr. Waters, London; Mr. T. Van Hooven, Leith; Mr. Eastfield, Dorking; Dr. Carless, Stroud; Dr. Dale, Plymouth; M. Parasurama Naicker Cuddalore; Mr. H. Moore; Mr. Furnell, London; Mr. Cooper, Newtown; Mr. Fowler, Brierly Hill; Dr. Lawrence, Darlington; Mr. Webber, Colchester; Mr. Watson, Stockport; Mr. Deacon, London; Mr. R. Alford, Hungerford; Mr. S. Hanson, London; Mr. Moffat, Bedford; Mr. Bond, Glasgow; Mr. Hunt, London; Mr. Pallester, York; Dr. Moir, Straithkinness; Mr. Sharp, Aylesbury; Dr. Stirling, Edinburgh; Mr. Manby, East Reedham; Mr. Barber, Ross; Mr. Thomas, Llanfair; Mr. Webb, Basingstoke; Mr. Steward, Huddersfield; Mr. Francis, Acton; Mr. Shepherd, Dublin; Mr. R. South, Bristol; Mr. T. Crosby, Yarmouth; Mr. Baker, Windover; Mr. Elliott, London; Dr. Macpherson, London; Mr. Drake, Hartlepool; Mr. Fuller, Lewton; Mr. Watson, Tring; Mr. Everard, Derby; Mr. Silver, Worthing; Dr. Knox, Bakewell; Mr. Cunningham, Richmond, U.S.A.; Mr. Fleming, Guildford; Mr. Sandford, Hulme; Mr. Herbert, Oxford; Mr. Norris, Perth; Mr. Anson, Swansea; Mr. Bremridge, London; Mr. Pierce, Manchester; Mr. Nicholls, Chelmsford; Mr. Fraser, Derby; Mr. Craven, Coventry; Mr. A. Godrich, London; Mr. Harris, London; Mr. Farrar, Borough Bridge; Dr. Hynes, Nottingham; Mr. Melville, Whitehaven; Mr. Marshall, Nottingham; Mr. Curling, Staines; Mr. Horsman, Dudley; Mr. J. Cameron, Stirling; Dr. Jelly, Madrid; Mr. Watkins, Enfield; Mr. Calder, Frome; Mr. Grant, London; Mr. Lane, Oxford; Mr. Bamford, Hull; Mr. Walford, Bexhill; Mr. Waugh, West Calder; Mr. Mason, Kingswinford; Dr. Shea, Reading; Dr. Hornblow, Writtle; Mr. Goode, Eltham; Mr. Craven, Canterbury; Mr. M'Creery, Fermoy; Mr. Anderson, British Guiana; Mr. Cole, London; Dr. MacDowall, London; Mr. Vignard, Selina; Mr. Lownds, Manchester; Mr. J. A. Jonson, London; Mr. Schmitz, London; Mr. Martin, Crawley; Rev. A. Ormerod, Norwich; Mr. Greening, Kidderminster; Mr. Langshaw, Lancaster; Mr. Fowler, Hereford; Mr. White, London; Mr. Fretwell, Rotherham; Dr. O'Connor, London; Mr. Kemp, London; Mr. Welch, Netley; Mr. Norris, South Petherton; Mr. Holman, London; Dr. Seaton, Sunbury; Mr. Harrison, Douglas; Dr. Ogle, Derby; Mr. Chapman, Cork; Mr. Hughes, Liverpool; Dr. C. Reed, London; Mr. Bland, Macclesfield; Mr. Morton, Louisville, Kentucky; Mr. Horwood, Tamworth; Mr. Gray, Bristol; Mr. F. H. Hodges, York; Colonel Bradshawe, South Norwood; Mr. Pooley, Stratford; Mr. Harrison, Henley; Mr. Connelly, Milltown; Dr. Harding, Whittlesea; Mr. Johnson, St. Andrews; Mr. Copping, Leek; Mr. Lane, Douglas; Mr. Horton, Bromley; Mr. P. Kirton, Barmouth; Mr. Norfield, Bawtry; Mr. Sinclair, Perth; Chirurgus; T. W.; Medicus; The Editor of *La Tribune Médicale*; H.; Theta; Another of them; R. J.; Surgeon R.N.; J. C. L.; W. H. C.; A Student; T. T.; A Constant Reader; J. C. B.; Mica; M. M.; &c. &c.

Bradford Daily Telegraph, *Derbyshire Advertiser*, *Science Gossip*, *Echo*, *Dundee Advertiser*, *Schoolmaster*, and *Shepton Mallet Journal* have been received.